

THE AMERICAN FARMER,

SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." Virg.

Vol. II.

BALTIMORE, APRIL, 1847.

No. 10.

WORK FOR APRIL.

It is almost superfluous for us to say to our brethren of the plough, that much of their success in their corn and oats crops will depend upon the industry and vigilance they may use during this month, from its earliest incoming,—but as a timely hint is often serviceable to those the most care taking and systematic in their habits, we will make such remarks as appear to us to be suited to the season. This month is one often fruitful of showers, and as that is the character justly ceded to it, every clear day should be embraced to carry forward the operations of the field. No opportunity should be omitted either in the accumulation of, or the carrying the manure to, the corn-ground, so as to have it in place to be turned under at the proper time; and, in order that no loss may be sustained from evaporation, we would advise that a bushel of plaster be added to every twenty double-horse cart loads and thoroughly mixed therewith. By such management of manure, deterioration in quality is not only prevented for the time being, but a character is imparted to it which prevents loss in the future, and thus are many of its most fertilizing properties preserved for the use of the growing crops, which would otherwise be lost by evaporation. While we enjoin this duty with regard to the manure of the corn crop, we would be permitted to observe, that the preparation of the field for oats should command early attention, and that where the soil may not be in good heart—of moderate fertility—that it should be assisted in some form.

Having thus prefaced our labors for the month, it may be necessary to point out a few of the many things which should claim precedence

ON THE FARM.

Fences.—As it is useless to attempt to farm without good fences to protect the crops while growing, we would enjoin it upon every husbandman to make a thorough examination of every panel of fence on

the place, and have all necessary repairs made without delay. Bad fences often tempt neighbors' cattle to break in, and not unfrequently produce ill feeling between those who should be bound together by bonds of the most indissoluble friendship. But there is another consideration which should address itself to one's pride and self-respect. A stranger passing along the road often judges of the character of the owner of a farm by the condition of his fences—if he finds these in bad repair, and the sides and corners infested with briars, brambles and bushes, without knowing anything of the true character or condition of the proprietor, he concludes in his own mind that his habits are slovenly. This conclusion may or may not be just; but as every one should be animated by that laudable ambition which teaches us to appreciate the good opinion of our fellow men, so should each strive to place himself in a position to deserve that good opinion. Therefore, we say to all, repair your fences, bars and gates, and cut down all the bushes which may infest your fence sides and corners.

Hauling out Manure.—Those who may not have completed this work, should lose no time in doing so—and as we have in our introductory remarks enforced the importance of mixing plaster with the manure before hauling it out, we will content ourselves in this place, by simply observing, that a bushel of plaster thoroughly mixed with twenty loads of manure, increases its value fully one hundred per cent. Such being the honest conviction of our mind, we desire to impress the fact upon the minds of our readers.

Sowing Oats.—As ordinarily cultivated, the oats crop cannot be said to be a profitable one, and yet we believe that with proper care it may be made so. There are many well attested instances in which from 60 to 110 bushels have been grown upon an acre, and yet we are very much disposed to question whether, upon a general average, more than 20 bushels are raised upon that quantity of land. This difference we should think is referrible to improper culture, or probably to the fact that the poorest

field is most generally selected for the growing of this grain. Authors, as well as practical farmers, incline to the opinion that oats is an exhausting crop—which fact we do not question—does not that fact argue that the oats, to insure its proper growth and yield, requires better soil than is usually allotted to it? We think it does. Then we would ask, why is it so neglected? All soils to qualify them to bring forth full crops of oats, besides being moderately supplied with nutritive manures, should have in their elemental constituents, the mineral manures also, as lime and ashes, as each are necessary to the successful growing of a crop. Where land on which oats are to be grown may not have been limed or ashed previously, five bushels of each to the acre would answer all present purposes, which, after being strewn thereon might be harrowed in at the time of sowing the oats. If the land is what is termed thin land, great advantage would result to sowing on each acre a bushel of plaster after the oats are harrowed in. This being done, the roller should pass over the field to compass the earth around the oats-seed and give an early start to germination.

Time of Sowing.—With regard to the time of sowing, that must be regulated by the location and condition of the soil. As a general rule, it may be said that oats should be sown so soon in the spring as the ground can be ploughed and put in good condition—it being a conceded point, that the earliest sown oats yield the most grain. It should, however, be recollect ed, that oats thrive best when they are committed to the earth at a time when they are secured in a dry bed.

Preparation of the Seed.—As oats, like wheat, is subject to the smut, the same preventive means as is used in the preparation of the latter seed would avail in the former—which is, to prepare a pickle with salt which will float an egg—soak the seed in it for 12 hours, drain off the pickle, and dry the seed oats in ashes or lime, and sow them as soon afterwards as possible. Where seed oats may be thus prepared, we should think it best to plough them in about three inches deep, so that they shall not suffer by the influence of the sun and air.

Selection of Seed.—It should be an object with every grower to sow none but clean, heavy, plump seed,—and still better, to change the seed every two or three years,—preferring for seed such oats as were grown north of his own location.

Quantity of seed per Acre.—Two bushels per acre is the usual quantity sown. We, however, observed that the largest products have resulted, where from three to four bushels of seed per acre have been sown. The oats is a plant which will tiller freely where room is allowed for it to do so, but still as the plants which thus spring up are neither as forward nor strong as those which come up at first, the grain upon them do not mature as early as the rest, and hence the necessity of thick sowing at the onset.

As a preventive against the worm which sometimes

proves destructive to the oat-plant, it is well to sow two bushels of salt per acre, just after the plants come up, and it would be better if the salt used were old fish salt.

Preparation of Corn ground, and Planting.—As a general rule it may be said to be safest to get the corn planted at the earliest possible period in the spring after the ground is in a condition, from the absence of frost, to be put in good condition. Corn, as all will admit, requires that the soil should be put in the very best possible order, to ensure an abundant yield. Where the soil is stiff clay, care must be taken not to plough it when it may be wet, for in that event it will be little better than a bed of mortar when first turned up, and so will it remain to the end of the season. Every good corn planter knows the right time to plough, and no consideration of time should induce him to break up his ground when it may not be in proper condition for so doing. Ground, whether clay, mould, or sand, intended for a crop of corn, should be ploughed deep, as the roots of the plant have been known to descend upwards of 4 feet, and the presumption is, that they so descend in search of mineral food which they could not find nearer the surface. If this supposition be correct, then it follows as a natural inference, that the less obstruction the roots meet in this descent, the better will their object be effected. In the spreading of the manure, the utmost care should be observed to spread it evenly over the whole surface of the soil, in order that an equality of food may be found, in which ever way the rootlets may spread themselves in search of it. As lime and ashes are necessary in the growth of the corn plant, it, of course, should be an object with all to provide his field with these minerals. If the means and time be not at command to give a full dressing of these manures, the most decided advantage would result from applying five bushels of each per acre. This may be applied at the time of planting, at the time of the first working, or at any time between these two periods.

Quantity of Manure per Acre.—Corn being a plant that delights in voluptuous feeding, too much manure cannot be given to it; it may, however, be assumed as a safe rule, that 20 double-cart loads, per acre, is about the proper quantity.

Clover and Grass Legs.—Where corn may be planted on such lands the grub and cut worm is often found mischievous; as a preventive of their ravages, it will be found serviceable to sow two bushels of salt per acre, along the rows of corn just after it is planted and covered.

Distance of Planting.—It would be a waste of time to prescribe any particular distance as the best one, as almost every neighborhood has its peculiar views upon this head. We will, however, remark, by the way, that a large crop of corn cannot be grown upon an acre, unless you give to that acre the requisite number of stalks from which to gather the ears—and that, in nearly every instance in which an extraordi-

nary yield has resulted, that close planting has been observed. The corn plant, in its growth, as well as the fructification and maturation of its seed, requires sun and air—and these, we think, can be secured to it where the rows are 4 by 3, two stalks in the hill.

Preparation of the Seed.—Take 1 lb. salt-petre, and 1 gallon of soot, put them in a half barrel, pour thereon slowly 10 gallons of boiling water, stir the whole well together, until the heat of the water is somewhat reduced, then put in a bushel of seed corn and let it soak for 12 hours—then drain off the seed, and dry it in a mixture of equal portions of *plaster* and *ashes*, when it will be fit to plant. The seed should always be planted the same day it may be taken out of the soak,—it may however remain in the soak for several successive days without injury.

Another Soak.—Take 1 lb. Saltpetre and 1 lb. Copperas, pour 10 gallons of boiling water, stir till dissolved, then put in a bushel of corn, and let it remain 12 hours. When you are about to plant put a quart of tar into a tub, pour over it 4 gallons of boiling water, stir till dissolved, when you must put in your corn and stir it about, then drain, and dry it in equal quantities of plaster and ashes, when it will be fit to plant. This soak will answer several times.

Seed Corn.—prepared in either way, will germinate much quicker than if planted without it, and will thereby receive an impetus at its first starting, highly conducive to its luxuriant growth, besides being, as it were, secured to a degree against birds and insects. Corn thus prepared should be rolled to insure it against dry weather.

As it is important to encourage a rapid growth in the early stage of its existence, if time and convenience should suit, it would be well to make a compost in the following proportions for each acre. Mix together 10 bushels of rich mould, or well rotted manure, 1 bushel of plaster, 1 bushel of salt, and 5 of ashes, and sow the same evenly over the rows any time between the period of planting and the time of the first working.

The plan recommended may be thought to involve too much trouble, but at the present price of corn, which it is but fair to presume will continue another season at least, it will pay well; as we are very certain it would increase the product twenty-five per cent.

Scare Crows.—As the crow and crow black-bird commit serious depredations upon the corn-field, and it is impossible to drive them off by any personal means within the power of the application of the planter, it is always safest to provide an efficient scarecrow, and we will here remark, that the only ones deserving of this character that we have ever seen, are sheets of bright tin, suspended by a wire upon poles sufficiently elevated to be seen over the field. The slightest wind causes a motion, whose reflection is as sure to frighten off the birds as would the flash of a gun. Four sheets of tin, judiciously placed, would protect a 50 acre field of corn.

Barley.—No delay should be permitted in getting in this crop.

Early Potatoes.—Those who may not have already got in their early potatoes should plant forthwith. Procure good sound potatoes, soak them half a day in salt brine strong enough to bear an egg, then dry them in a mixture of plaster and ashes, and plant them. In the preparation of the ground, plough deep, pulverize freely by harrowing, manure in the hill or row with long manure, then strew lime over the same and cover. When the plants first come up, strew a mixture of 3 parts lime and 1 salt over them, and cultivate so as to maintain a flat topped hill; keep the ground open and clear of weeds.

Early Carrots, Parsnips, and Beets.—The sooner a small patch of these are put in for *early* use the better. It is however too soon to sow for a main crop for fall, winter, and spring consumption. As table vegetables they are deserved favorites, therefore they should be grown on every farm and plantation—as food for milch-cows in winter and early spring they are truly valuable, if judiciously used in addition to the ordinary long food; nor are they less so to ewes in lamb, or to those which are suckling. Although, as we have before premised, it is too early to put in a main crop of these roots, we have deemed it to be our duty to revert thus timely to the subject, with the view of directing attention to their culture as stock food. With a supply of these roots, no farmer or planter need be without good fresh butter throughout the winter and early spring months, as besides being conducive to the secretion of milk, they impart a richness to the milk, which is only excelled by that produced by the luxuriant verdure of May pasture.

Sowing of Clover Seed.—It is late for this operation; but still, if we had a wheat-field unsown, we should not hesitate to cast seed upon its surface, as we do hold it to be an indispensable duty of every good farmer to sow clover seed on every field he may have in wheat. Certain are we, that no soil can be kept up to a profitable state of fertility, unless it be clovered and limed. Wherever Clover-seed may be sown thus late, so soon as the crop of grain may be cut and removed, the field of young clover should be plastered, at the rate of a bushel of plaster to the acre, in order that it may be pushed forward in its growth and thus protected from the scorching rays of the summer's sun.

Hemp and Flax.—The sooner these crops are gotten in the better; therefore, no delay should be permitted before the grounds are put in order and the seed sown. The soil best adapted to the growth of these plants is a rich deep soil, in which there is a great mass of undecomposed vegetable matter, which should be thoroughly ploughed and pulverized, by repeated harrowings. The quantity of seed, per acre, is from 1½ to 2 bushels, which is usually sown broadcast. The seed may be either ploughed or harrowed in. In either case the seed should be buried shallow, and in order to give them an early germination, it is best to roll the ground.

Milch Cows.—As these come into the pail, they should receive rich slops in addition to their allowances of hay or fodder, and thus be prepared to bear the increased demands made upon their strength,—and to prevent the hollow horn, a teaspoonful of spirits of turpentine should be poured into the cup or cavity situate on the back of the head, between the horns.

In-Calf Cows and Heifers should receive additional allowances of good hay or fodder,—and so soon as they may calve receive daily allowances of nourishing slops and mashes.

Ewes which are suckling should be allowed daily portions of roots, in addition to their long food. If there should be no roots to give them, a gill of meal of some kind should be substituted for the roots. Those whose chief object in the raising of sheep is the sale of the *fleeces*, should make it a point to raise beans, to have ground into meal to feed their sheep upon, as it is a conceded point, that beans contain more of the wool forming principle than any other substance which can be given to them. All the other sheep should be attended to and fed well, so that they may be in good heart when turned out to pasture. *Salt* should be always within the reach of sheep.

Working Animals, of all descriptions, should have increased care and attention paid to them. They should be well curried twice a day, rubbed down with straw, well fed and well bedded. This is a season when heavy demands are made upon their strength, and it is but just that they should be supplied with the means of meeting them—and these means are only to be found in kind treatment, and plenty of such food as will encourage the formation of flesh, impart energy to the muscles, without provoking into activity those functions of the animal economy which produce obesity—a condition by no means favorable to the creation of those powers which are essential to the endurance of prolonged labors. Oats and good sound hay and fodder is the best food for such animals, at this season of the year,—and the oats would be the better of being chopt before being fed, to be mixed with cut hay.

Salt, or *Salt* and *Lime*, mixed in equal portions, should be given at least twice a week.

In-pig Sows.—These animals, as they disburthen themselves, should be generously supplied with nourishing slops, in which vegetables and meal or bran abounds.

Guano.—We are gratified to learn that this excellent manure is becoming a decided favorite with the practical farmers, as it has long been with theoretical ones. Containing as it does, within itself, nearly, if not all, the elements which enter into the growth of plants, and necessary in the maturation of seeds, it is, we have always thought, the very best manure ever introduced into our country; and certainly no one will gainsay its being the *cheapest*, when it is considered, that a strong man can carry to the field as much upon his shoulders as will manure an acre—and manure it well. In view of the many excellencies possessed by it, we commend it to the public favor, and would call upon the corn-planters to buy as many hundred pounds of Guano as will enable them to apply 200 lbs. to each of 5 acres in corn, so as fairly to test the relative value of that quantity, when compared with 20 double-horse-cart loads of the very best stable or barn-yard manure.

In closing our monthly talk, we would be permitted to hope, that the present season may bring forth abundant harvests, that these may find ready markets and good prices, and further, that Providence, in his mercy and wisdom, may be pleased to bless our country with health, and a speedy restoration to a condition of peace.

CALVES.—If you have a very fine cow-calf, possessing fine points, don't sell it to the butcher, but keep it, raise it, and see if you cannot be rewarded for so doing in her making a superior dairy cow.

Bees.—Every farmer should have a few hives of bees. They cost but a little in their acquisition, feed themselves, and supply the family with two necessary articles—*honey* and *bees-wax*. The first is relished by the children—old and young—as a luxury, and serves in the preparation of many compound medicines, while the latter is susceptible of being used to wax the thread of the sempstress, in the manufacture of candles, polishing the furniture, and in the preparation of salves.

HOW MANURE SHOULD BE APPLIED.

Westmoreland County, Va. }
March 12, 1847. }

To the Editor of the American Farmer.

Mr. Editor,—In perusing the directions to farmers, given by you, in the March No. of your valuable paper, my attention was particularly called to that portion of your remarks, where you urge cultivators of the soil, to let nothing prevent them from hauling out all the manure they can raise on lands intended for coming crops of corn. As there are various opinions in regard to the best modes of applying manure, and as you omitted giving your views, I would be pleased to see them in a future No. I submit the following questions for information. Is it better to scatter the manure broad-cast and plough it in? Or to fallow the land first, top-dress and harrow it in? Which of the above plans would benefit the land and crops most? Is it better to mix shell lime with cow-pen manure (composed of tops, stalks, shucks and wheat straw, forming a compost) and let it lie over to the next winter? Or to haul it out this spring on the land and scatter the lime over it? Your answer to these questions will oblige

A SUBSCRIBER.

REPLY.—Our correspondent asks us the following questions, which we will endeavor to answer in the order in which they are propounded:

1st. "Is it best to scatter the manure broad-cast and plough it in? or to fallow the land first, top-dress and harrow?"

Here, in fact, are two questions, but as they resolve themselves into one, we shall so treat them. The mode of applying manure is a debateable question, on which very sensible men entertain very different opinions. While some contend that manure, when used upon fallowed land, should always be buried several inches beneath the earth—that is, as deep as the plough can turn it under—with the view of preventing loss from evaporation, others contend, that its application on the surface is the best method, and deny that the exhalation by the sun does abstract from it its meliorating power. Our late eminent countrymen, James Garnett of Virginia, and General Emory, of this State, maintained, while living, this latter opinion. Both of these gentlemen were alike distinguished for their great zeal in agricultural pursuits, high order of talents, discriminating minds and close observation. Such high authority should not be without its influence upon the minds of others. Much has been written upon this subject, but

still the public agricultural mind has not settled down upon any definite opinion, and it is not likely that it will speedily do so. That the exposure of manure, in a state of decomposition, to the influence of the atmosphere and the rains—to heat and moisture—is calculated to impair its virtues, appears to us to be a fact so consonant with sound philosophy and common sense, that we should be unwilling to attempt to gainsay it. While ever the process of decomposition is going on, it is reasonable to suppose that there is loss in the virtues of the manure, in the escape of the fertilizing gases. The nitrogen formed, being lighter than atmospheric air, is wafted off by that medium and lost to cultivation. If, however, we can apply a substance calculated to attract, absorb and condense these gases, this loss may be prevented,—and in that case manure may be as well applied upon the surface, harrowed in, as ploughed under by the plough. We believe that a substance competent to perform all these offices is readily available—that gypsum, or plaster of Paris, as the Sulphate of lime is called, will do it. If then we are correct in our view, our correspondent would, at least, be safe in applying his manure in the way indicated by the latter branch of his question.

3. He asks which of the above plans—(the ploughing in the manure, or harrowing it in) would benefit the land and crop most?

Now, to be candid, we are not prepared to answer this question. It is more than any individual could undertake to say, until he had made successive trials, for a series of years, of the two plans of application, under precisely similar circumstances of crops and soil. Were we about to apply manure to a corn crop, we should not hesitate to adopt both or either plan. Or to take, perhaps, a middle course would possibly be better than either—that is, to plough in one-half, and top-dress with the other half, and harrow it in. By such a division of the manure, the plants, in their early growth, would be pressed onward by the manure harrowed in, lying within an inch or two of the surface, while that which was ploughed in, would serve as a depot, to furnish food as they should have attained more age, and of course sent their roots below in search of nutriment.

4. Is it better to mix shell-lime with cow-pen manure, composed of tops, stalks, shucks and wheat straw, forming a compost, and let it lie over to the next winter, or to haul it out this spring on the land and scatter the lime over it?

We would adopt neither plan. We presume from the tenor of the question, that this manure and lime is not intended to be used on any crop the present season. If we are correct in this reading of our correspondent's question,—what we would do under similar circumstances would be this. We would haul out the shell lime as soon as possible, spread it equally over the land, and let it lie until we were about to fallow the land for a crop. While thus lying it would become air-slaked, and encourage a

carpet of white clover, a very excellent plant to turn under. The manure we would form into piles in the shape of a cone, so as to turn off water. Over these piles we would put a covering of earth of some kind, fully 8 or 10 inches in depth, to keep down temperature, so that the decomposition might go on gradually, and none of the volatile principles of fertility be lost. By this management, all the superincumbent earth would be converted into rich manure—and, when about to use this manure in the field we would mix with every 20 double-horse cart loads, a bushel of plaster, and thus prevent the possibility of deterioration. Shell-lime, in its quick state, whether applied in the mass, or on the top of manure sown broadcast, would act in the two-fold way of promoting decomposition and of driving off its most fertilizing properties, the which would lessen the value of the animal manure, without in the least adding to the capacity of the mineral to perform its peculiar offices.

EMBANKMENT OF RIVERS.

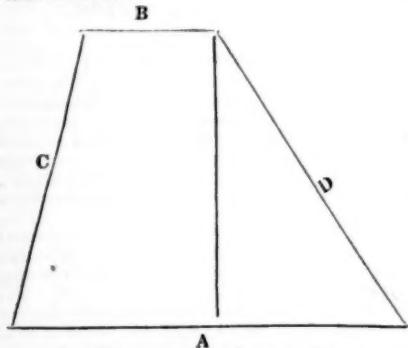
To the Editor of the American Farmer.

Eglington, March 10th, 1847.

Mr. Editor,—In your last No. of the American Farmer, I find a call made upon me by "Subscriber," for information in reference to "banking out the tide water of the Patuxent river." I am sorry I cannot gratify your "Subscriber." I have no experience upon the subject; although lying upon the Patuxent, my farm is several miles above the tide waters of that river.

The embankment I made was intended to protect low lands against the freshets of that river, which are very destructive when they occur, for the natural banks of the river are generally, very low. The embankment I made was 16 feet broad, at the bottom; 8 feet high and 6 feet wide at top; made of solid earth, and gravel stone and some heavy logs on the sides. It cost one dollar and a half per perch, beside much help with my own negroes. We had the past season one of the greatest freshets ever known in the river, and it happened before the bank was settled, so it was caught at the worse possible moment; but while the freshet passed over it, and it was for forty eight hours concealed from view by the waters, it was in the end not very materially injured. It was washed down considerably, but what was left was rendered very firm and solid. I am now sure, if it had been four feet higher, it would have sustained no damage. I feel every assurance that I shall succeed in my attempt, although the cost will be at least \$125 per acre. This land is like the Mississippi bottoms—all alluvion; the deeper you penetrate the better it becomes. As it stood, it was worth nothing.—Judging from a small piece I have reclaimed, I am of opinion that it will yield annually two and a half tons to the acre of good hay, beside yielding excellent pasture for months. The pasture would at least be worth the expense of cutting and curing the hay and the taxes on the land. The two and a half tons at even \$12 per ton would be \$30, which is exactly 24 per cent. upon the cost of the land. This is equal to any cotton factory stock. If "Subscriber" has any such land on "tide water," I would advise him by all means to commence at once upon a few acres and he will be repaid. Tide water is far

more easy to guard against than freshets in a river like the Patuxent, which has low banks and its channels obstructed by fallen trees, and other obstructions which have been the accumulation of years, and often changing its course, so as to form islands, and taking a slip of land from one, and adding it to another. In Europe, particularly in Holland and Belgium, and on the coasts of England, by proper embankments they back out the tide of "old ocean's wave," and find it a safe and profitable expenditure, so fertile are the lands thus obtained and so easily irrigated. I once read a very learned treatise upon "Embanking and Draining," by a Scotchman, I believe, for I have at this moment forgotten the author's name, and he laid it down as a good rule for banks like those I am alluding to, to be one-half as high as broad at bottom, and half as broad at top as it was high; thus a bank 12 feet at bottom, should not be over 6 feet high and 3 feet wide at top. This gives a very gentle slope on the side next to the water, and rather a straight side next to the land. To do this accurately rough frames should be set up at convenient distances, as guides in the formation of the bank. The frames might be made light somewhat after this form:



A. is the bottom of the bank; B the top; C the straight side next to the land; D the sloping side next to the water.

A bank of this dimension in good, fair ground ought not to cost over \$1 per perch, and be turfed over as it is put up, on the straight side and the top. The object of the sloping side, is to break more gently the force of the water, as it presents not so abrupt a resistance, and therefore less likely to be washed away or undermined. All that is necessary, is to exercise a sound proper judgment as to the height necessary for the Bank, and by this rule a safe and lasting barrier will be erected if it is followed out strictly. Let no brush, or stakes, or trees or roots be allowed in the bank, for they leave crevices for the water to penetrate, and work gradually a way through the whole fabric, and they also entice rats, and other wild animals to resort to it for a habitation convenient to the water. These crude views, hastily thrown together, I hope, may be useful to your "Subscriber." If so, I shall be amply repaid for my trouble.

I find also, in the same number of your paper, a well written reply to my letter on the "Potato Rot," by that fine old gentleman, capital farmer and prince of hospitality! James Gowen, Esq. He has entertained and instructed, without convincing me that he is wholly right, and that I am entirely wrong. I am pleased that my article has elicited a reply from so

ready a pen, and am indebted for the passing compliment he is pleased to pay me, as well as the hits he gives me in his pleasantry, but at present other engagements prevent my entering the "tilt-yard" with him. Perhaps it is well for me, as I should not like an "old soldier" to put me in my first pitched battle so completely "hors-de-combat" as he confidently expects to do, and as perhaps he might, for although I have as large a stock of good humour as he, yet I lack that experience and that "wit" of which he in common with most of his high-souled countrymen can boast. Another reason too, is that the great N. Biddle, Esq. has said it was "presumptuous for any man in our society to compete with me (him) in raising potatoes." By the way, my respected friend must let me have some of those "Lady Fingers," that have been generated at Mount Airy for forty years past. True to my theory, I must believe a cross of the Pennsylvania "Lady Fingers," with the "Bowie-seedling" of Maryland, would be a capital cross, for prolificness, and other excellent qualities. What do you think, Mr. Editor?* Very truly,

W. W. W. BOWIE.

[*No doubt of it.—Ed.]

ADJUSTABLE CULTIVATOR.

To the Editor of the American Farmer.

Sir:—When in the city a few days ago, I was induced to step into the store of Mr. E. Whitman, in Light Street, to see a new two-horse Cultivator which he is engaged in manufacturing—and upon examination of the machine, together with numerous certificates from persons who have used it, I have come to the conclusion that it is one of the most valuable agricultural implements I have ever seen—and I herewith send you description—an insertion of which in your excellent paper, will, I have no doubt, confer a favor on our agricultural friends.

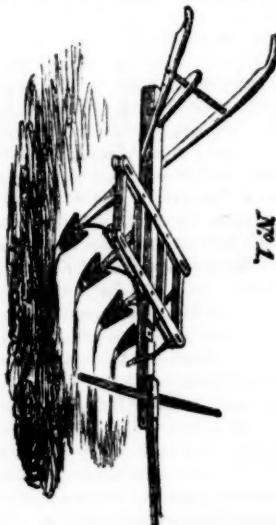


Fig. 1. The first drawing represents the Cultivator as it is used for ploughing in wheat, oats, and all other kinds of grain; and also for stirring fallow-ground, and putting ground in order for planting corn.

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nds.

The frame is jointed in such a way that it may be set either wide or close, or be converted into a corn plough, and having a pole connected to the frame like that of a small wagon, it moves remarkably steady, is easily managed, and performs the different kinds of work in a very superior manner.

By widening it between the shovels, it answers for the purpose of ribbing, a mode of putting in wheat, now practiced by many farmers in Pennsylvania and Ohio, after the land has been thoroughly ploughed and harrowed till it is in what would commonly be called good order for sowing. The method is to go over it with the common shovel plough, so as to leave the land in open furrows ten or eleven inches apart; the seed is then sown from one to one and a half bushels to the acre, and the ground harrowed over lengthwise of the furrows. The harrowing brings the seed into the furrow, and covers it there, and leaves slight ridges between, so that the plants appear as if drilled in rows, and the ridges afford them protection in winter, and keep the ground in a mellow state in summer; besides affording a free circulation of air, it is considered by many an improvement in the plan of ploughing in wheat, especially on such lands as are subject to winter-killing, and with the advantage of a considerable saving in the quantity of seed. It will be seen at a glance, that with the Cultivator, one person can do the work of four by the usual method, and at the same time do it more regularly.



Fig. 2. Represents the Cultivator adjusted as a corn plough—this is done in a few minutes by taking off the two pieces that support the frame and shifting round the left side of the machine so as to correspond with the right, and then putting on the top pins again, as represented in the beginning, and setting the machine to any width that may be desired;

at the same time shortening it by shifting the pole and double-tree backward to an additional notch made in the frame for that purpose. The advantages which it has over all the other implements for ploughing corn, are:

1st. The amount of labor saved, as one person can with ease plough 8 or 9 acres per day, finishing the middles; and as shovels pass on each side of the corn, soiling it at the same instant on both sides, the labor of setting up and hoeing after the plough, is in a great measure rendered unnecessary.

2nd. The ease with which it can be set wide at the first ploughing, when the corn is small, and closer to the row—the second ploughing, &c.

3d. By taking off the two centre shovels it suits most admirably to furrow out for planting, as it draws two furrows at once; and by attaching a marker on each side to extend just the distance of a furrow, a field can be furrowed out with the greatest exactness.

4th. Owing to the smallness of the furrow, and the loose soil naturally falling to the bottom upon which the corn is planted, and as the first effort that corn makes in growing is to take root downwards, it is much better than to plant on a hard surface, such as the furrow made by the common plough.

5th. A small furrow is better than a large one, as it collects a less quantity of water, and consequently the corn is not so liable to be washed out of the furrow.

These are some of the advantages, which I believe are to be gained by the use of this valuable time and labor-saving machine, to which I would respectfully invite the attention of our farmers. For I am fully persuaded that upon giving it a trial, they will be convinced that it is far superior to anything of the kind we have had heretofore—and from the well known character of the establishment from which they are sent, I am confident they will not be disappointed in the performance of their work, strength and durability.

A FRIEND TO THE FARMING INTEREST.

THE POTATO DISEASE.

To the Editor of the American Farmer.

The opinion of your correspondent, James Gowen, on the cause of the Potato Rot, as expressed in the last No. of the Farmer, and also on a former occasion, exactly accords with the view I have taken of it from the beginning. However, I attributed it more to humidity than heat. Excessive moisture or a soil retentive of moisture has produced the same disease for me many years ago, but not to the same extent as has been experienced these last years. I want here to suggest a mode of planting founded on my last year's experience, which may relieve the tubers from this effect of excessive moisture. Before mentioning it, I will state the facts which led me to think that we might be partially, if not entirely relieved from this disease.

I had three different pieces of ground in potatoes, one in the garden, one in a meadow high, gravelly ground, and one in a field that had been the previous year in corn. The one in the garden was manured in the hill—the other two had the manure broadcast. The piece in the meadow was a clover lay of three years standing. All of these were affected more or less. I thought those in the garden suffered most, which I attributed to an excessive growth of vines so as to entirely preclude the rays of the sun. The other two were planted early, about the middle

of April, and planted at least 6 inches in depth. They all grew off finely and gave promise of a good crop. But in August I found the vines giving indications of premature decay, which led me to examine the roots, when lo and behold, I found all the first formed tubers on the pan more or less decayed, while those formed between them and the surface were perfectly sound and so continued. I have no doubt in my mind but that the excessive moisture also injured the vines so as to bring on premature decay.

Now I propose running a subsoil plough in every furrow in which you plant, so that the redundancy of wet may be kept from the roots. It might perhaps be better to subsoil the whole piece.

Let as many as can, try it, and if spared till next autumn, give the result to the public. *We want facts in this matter—we may theorize till doomsday on this subject, and be no nearer the truth than when we started.*

Z.

Carroll County, Md., March 5th, 1847.

Some seedling Mercers which I have been planting for 4 or 5 years past, suffered as much as any other of the varieties planted. Those that seemed to suffer less, were of the less valuable kinds, as Rohan, Yellow-fleshed, Pink-eyes, and a variety from Ireland many years ago. The more farinaceous suffered most.

CORRECTIONS.

To the Editor of the American Farmer.

Dear Sir:—On reading my remarks on the "Potato Disease," as published in the last number of the "American Farmer," I could not but think that the manuscript was very defective, of which I have now no means of judging, or that the compositor was not a little in fault—be this as it may, permit me to amend or point out a few of the errors in the printed copy.

In the second paragraph of this first column, the word "line" is printed "lime," it should read, "By this means you could trace distinctly the blackened manure, in line, on the surface of the ground as turned up by the Plough, &c."

In the second line from top of third column, the word "in," is wanting after the word "set," and the dash should be out—it should read, "after the manure has been raked in or shook over the potato sets in the drill, to be covered, &c."

In the first sentence of the third paragraph, from top of same column, beginning with "Last season," there is much jumbling, and as I cannot transpose or rectify from the original, I take leave to give the substance or meaning, thus—"The Potatoes taken from an orchard on the College grounds adjoining me, were partially diseased, those immediately under the trees were sound, those in the spaces between the trees, being more exposed to the heat and atmosphere, were considerably affected by the rot."

Respectfully, JAMES GOWEN.
March 6th, 1847.

Cream that has been suffered to stand until rancid, or slightly mouldy, which is often the case, should never be churned; it may make very palatable cream cheese, but abominable bad butter. Cream never rises from the milk after thirty-six hours' standing. This may be proved by the lactometer. It becomes more solid and thus appears thicker, but nothing is gained in quantity, and much lost in quality, by suffering it to stand too long before skimming.—*American Agriculturist.*

MOUNT AIRY AGRICULTURAL COLLEGE.

It will be seen by the Circular of Mr. Gowen, that he contemplates opening his Agricultural College at Mount Airy, Germantown, near Philadelphia, on the 1st of September, provided the requisite number of students are entered by the 1st of July next. We cannot permit ourselves to entertain a doubt, for one moment, that the list will be speedily filled—and we hope and trust that our own state will have a large quota of the required number—The subject of Agricultural education is attracting the attention of the public at the present day, in a pre-eminent degree—and we deem it a public benefaction on the part of Mr. Gowen, with all his advantages, capital, talent and experience, in thus bringing into active operation a plan which is calculated to carry into practice the theory of some of the best and wisest men of our day. The reading of the circular will give all the desired information of the system intended to be adopted in the Institution, and the capacity of the Founder for such an undertaking is known and acknowledged wherever an agricultural publication is read, for his name and fame as a successful farmer have reached every quarter of the land. In connection with the Circular, we would invite attention to the Report of the Committee of the Montgomery Agricultural Society, made by Mr. Farquhar, upon the importance of an Agricultural education, which will be found in the present number.

MOUNT AIRY AGRICULTURAL COLLEGE.

The undersigned having for a series of years devoted himself to the pursuit and practice of Agriculture, and having with deep concern regarded its condition as a Profession or Calling, could not but perceive that there was wanting, something indispensable to give character and energy to an occupation acknowledged to be the most useful, and embracing in its extended range the most numerous class of the people of these United States. He has therefore been long convinced that the great desideratum to be supplied, is an Education, commensurate with the high destinies of the Landed Interest—a training in Rural Economy pending the progress of the student in Literature, so that when he shall graduate, he may not only have achieved the usual attainments acquired in mere literary Institutions, but exhibit a thorough and well grounded knowledge of practical and theoretical Agriculture and Horticulture, and possess in a superior degree, the presumable addition of good health and habits; being thereby the better fitted to enter upon the general duties of life, or into any profession as well as that of Agriculture. This presumed felicitous condition of the Graduate needs no demonstration, for it must be admitted, that the training and exercises of a properly conducted Agricultural College, will be naturally promotive of the priceless blessings of robust health, industrious habits, and a well regulated mind.

In the Eastern and Middle States many laudable efforts of late years, have been made to improve and elevate the position of the Farmer, but in the main, all have proved futile. In vain were Clubs and Societies formed; these could not invoke or inspire others to associate, and spend as they did, a little

time and money in the cause; for all must now perceive that Education, is the one thing needful, without which, all efforts are unavailing, in furtherance of the great object in view. In vain did Capitalists, charmed with the Rural, and desirous of setting an example, purchase Farms, and quit the Cities; for they soon returned in disappointment, if not in disgust. Why? Because they had not been fitted by education for the pursuits of Agriculture. They had to depend on Hirelings, and no money could procure, for it is not procurable, the intelligence and skill, adequate to the superintendence of the Yards, Stables and Stock—the Soils and Manures—the crops and cropping. Every Planter or owner of a Farm, should therefore be able to direct and instruct in all the leading interests and operations on his estate, for it is as much as he can hope, or under the circumstance expect, if his labourers carry out his orders in the detail.

To educate youth in the leading branches of popular learning as taught in our Colleges, with the addition of practical and theoretical Agriculture and Horticulture, with their attendant sciences, the Undersigned contemplated Founding an Agricultural College at Mount Airy, his residence, eight miles from the City of Philadelphia, a site favorably known for its Healthiness and Beauty, and as having until recently been, for many years, a seat of learning, and now, in Gardens, Grounds, and Buildings admirably suited for the purpose.

Students will be admitted at Ten years old and upwards. The younger Pupils in the elementary branches of the Scholastic department will receive special and particular attention. The more advanced in years and learning, on entering will be classed according to their qualifications, and all will be carried forward as rapidly and understandingly as practicable, to a perfect and thorough completion. In the Agricultural department, a similar classification will be made in view of the age and capacity of the Students, and their exercises proportioned accordingly. Each little Boy will have his Budding and Pruning Knife, his miniature Rake and Hoe, and in fine weather will daily repair to the Gardens and Nurseries, and there be taught the nomenclature of Plants, flowers, &c., their culture, habits and properties, and the necessary manipulations of producing: after an hour spent in this healthful recreation, he will return to the Class-room, and resume his studies. As he advances in years and strength, he will be introduced to the more weighty and important concerns of Agriculture, in which the senior Classes will be engaged. The exercise of labour of all however, will amount to no more than will be deemed necessary for healthful recreation and change, to diversify and lighten the monotonous and depressing drudgery of the mere student. In this way, by a varied course of study, rural exercise, and popular Lectures, it is intended to accomplish the important work, and to give to Agriculture, an impulse that cannot fail to raise it to the rank it should assume, and ought to hold throughout the land.

The Graduates of this College will be Scholars, and Gentlemen, who if they inherit an Estate, will know more than their Gardeners, Overseers or Land Stewards,—be conversant with the Breeds, Character, and properties of Stock, the mechanism and the use of Implements,—the quality of Soils, and the adaption of Manures, and withal, practical Surveyors; while the taste acquired for Rural Life, will render the management of their Plantations a pleasing occupation, combining both pleasure and profit. If on the other hand they should have to acquire an Estate,

what other Graduates could hope to compete with them in the acquisition of Property and honorable fame?

These views are respectfully submitted by way of Prospectus, affording a glance at the aims and merits of the contemplated Institution, and for the purpose of eliciting such share of patronage as will encourage the undersigned to carry out his long cherished design. If therefore Eighty Students shall offer, on or before the first day of July next, he will open the College on the first day of September following, with a Faculty combining the best talent, both in Literature and Rural Economy.

The terms will be *Two-Hundred Dollars per Annum*, for Board and Tuition, payable half-yearly in advance—*no extras*, except for Modern Languages, for which it may be necessary to make some additional charge; all of which, when properly matured, will be stated in a special prospectus, when the requisite number of Students shall appear to be forthcoming.

Parents wishing to avail themselves of this plan of educating their Sons, will please address JAMES GOWEN, Mount Airy, Philadelphia, stating age, and acquirements in learning. It is requested that early application be made, as the opening of the College is contingent upon the number of Students offering, and as much of the *matériel* necessary to its perfect organization must be withheld, until it is ascertained that sufficient patronage will be accorded.

A word as to the Undersigned himself.—To those who know him, 'tis needless to say, that this great undertaking is prompted by no interested motive whatever; for all the capital to be employed, and all the trouble and anxiety incurred, he expects not a dollar by way of profit or remuneration for his services.—He therefore wishes to stand in the proper attitude before all, and leave to all the means of making a fair estimate, and coming to a proper determination so far as they may feel interested.

Respectfully,
JAMES GOWEN.

Feb. 22d, Washington's Birth Day, 1847.

“ THE MONTGOMERY COUNTY AGRICULTURAL SOCIETY.”

This Society held its second quarterly meeting in the Court House, in Rockville, on the first Wednesday in March Court, being the 10th of the month.—In the Chair, JOHN P. C. PETER, Esq. Among other proceedings, the following Report upon the subject of Agricultural Education, was submitted by the chairman of the committee appointed for the purpose, W. H. FARQUHAR, Esq., which we take much pleasure in transferring to our columns. It is a paper worthy of the consideration of every friend to the Farming interests, and it is gratifying to find the subject of the report engaging the attention of the intelligent agriculturists of our State and country.

REPORT OF THE COMMITTEE ON AGRICULTURAL EDUCATION.

The Committee appointed at your last meeting in accordance with the requisitions of the Constitution, to prepare a report upon the subject of Agricultural Education, beg leave to submit the following, as the result of their reflections upon this important topic.

Your Committee do not consider themselves called upon to branch out into observations upon the subject

of Education in general. The paramount importance of this great object is sufficiently acknowledged; and the considerations which impel the minds of our people in favor of promoting it by every means in their power, are not lacking in weight or efficacy. All admit that the liberal diffusion of Education in this Country is to be regarded not only as inseparable from its happiness and progress, but even as essential to the continuance of its political existence. The people are to be educated: and increased facilities for this purpose are to be afforded, with the increasing resources of the State. This is a matter well understood; and in the view of your Committee, it does not require to be further urged at their hands.

The question then, first occurs, is, what is the sort of Education which needs most especially to be diffused among the rising generation in which our lot is cast? There cannot be any difficulty in answering this question, if we will only look at the leading pursuits which occupy the great mass of our people. The sort of Education must be the most beautiful and desirable, which best adapted to expand the faculties and to develope the resources of the most numerous class. Amongst us, this class is pre-eminently the Agricultural,—the class of Farmers,—that class which has ever contributed most to the State, and received the least.

Your Committee are therefore of opinion, that in order to render the great cause of Education, about which so much is said and sung, full and practically beneficial amongst us, it is now especially requisite to adapt it to the interests of our Agriculturists; that the time has come when the subject of Agricultural Education, should occupy a prominent place in the arrangements that are made for the instructions of youth.

We believe there is no class of people who so imperatively demand an Education adapted to the nature of their pursuits, as the sons of farmers, and that no where else can education be made to yield such valuable fruits.

The remark has often been made that of all the important occupations to which men have applied themselves, Agriculture has gained the least from the improvement and cultivation of the Arts and Sciences. Under their fostering influences, every branch of Manufactures and Commerce has swelled out into tenfold magnitude, and been diffused, into a thousand new channels: While in the greatest and earliest department of human business, one which has always employed and ever must employ by far the largest part of the race, men have been contented to grope along in the footsteps of their fathers. Within quite a recent period, this remark has been to some extent, deprived of its force and justice. Science has at length deigned to shed some of her light on this obscure field of human industry; and the result is, in the highest degree, satisfactory and becoming. Already an immense addition has been made to the resources of the Agriculturist, by the researches and experiments of scientific men. And your committee are firmly convinced that all which has yet been accomplished in this way, is merely a small beginning—a slight foretaste of the benefits that are to result from the application of Science to Agriculture.—But to ensure the realization of these benefits it is essential that Agricultural Education should be diffused. It is not sufficient that learned individuals should here and there devote themselves to the cultivation of this Science. Such men may make many important discoveries. But we all know how slowly these discoveries are diffused among an instructed

population.—Where the results of a new experiment are very striking, men will to some extent, be willing to repeat an application which their own eyes have seen to be so successful in the hands of another.—Yet even the progress of the improvement is slow. Farmers are a cautious people; and they hesitate a long time in exposing themselves to the risk of being humbugged—more particularly when the undertaking involves an outlay of Capital. In this way, they fail to take advantage of the opportunities within their reach, and so much precious time is lost. Something then is needed to enable the Farmer to appreciate properly the improvements which Science is effecting in his profession. This can be effected only by his making some acquaintance with the principles upon which Scientific Agriculture is founded.

In illustration of this view, your Committee will induce the instance of an article which has been used to great advantage during the last two or three years, by a few of the Citizens of our County; and which, they believe, is destined to be productive of immensely greater benefits. The article alluded to is Guano. Its effects have been so evident that few who have seen them, could venture to doubt its utility: and yet it is necessary in order to appreciate its true value. Some have likened this substance to plaster; and have predicted that its beneficial operation would be transient, and its use be followed by a still further exhaustion of the soil. But the Agricultural Chemist, who takes the article to pieces, and discovers in it a dozen different substances which exist in the stalk and grain of wheat, and which are absolutely requisite for its growth, feels satisfied, that in supplying Guano to the soil, he is simply giving his crop the food it demands. We forbear, however to dwell longer upon the qualities of an article, to which we look with confidence for such important aid in the great work of renovating the exhausted fields of our County.

The grand, leading idea which modern Science has given to Agriculture, appears to your Committee to be this; that growing plants derive far the greatest part of their bulk from the Atmosphere, and require absolutely from the soil only a minute quantity of a number of earthy and alkaline substances: consequently that any soil may be rendered highly productive of supplying it with these latter materials, which are furnished to us in a portable form in Guano, bone dust, poudrette, &c. This consideration holds out high hopes in regard to the practicability of restoring soils which a bad system has exhausted of these essential ingredients. All that is wanted is the application of a sufficient amount of Capital to this object: and your Committee are firmly of the opinion that Capital can and will be found so soon as the conviction shall be spread through the community, that it can in this way be profitably employed.

The first step however is to arouse and enlighten the minds of the farming community. Science and practice must go hand in hand, before they will be able to produce their full effect. Separated from each other, they work to great advantage; *Unite* them in the same hands, and who shall set bounds to their influence?

It appears then to your Committee that the most important part of their duty, will consist in suggesting the practical means to consummate this union of science and practice: And for this purpose, they do not hesitate earnestly to urge the institution of *Agricultural Schools*, as being by far the best means of effecting the great object we have in view.—Establishments of this sort, properly conducted, offer the fairest pro-

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mise of success in diffusing Agricultural Education, and in a way most in harmony with the spirit of our Republican institutions.—From such a Seminary, the seeds of Agricultural Science would be scattered broad-cast over the land.

Another benefit would flow from it, equal in value to all the others: the exercise of mind and body, required in schools of this sort, would invigorate the faculties of both, and demonstrate the blessings of this mingled exercise. Under the patronage of Education, labor would come to be respected as it deserves. It is true, labor has always been *respectable* in this country; but to be *respectable*, and to be *respected*, are two very different things. No one amongst us, would venture to say *anything* against the honest laborer. A great many very handsome speeches are constantly made in his praise. Lyrics have been written and sung in his honor. But in spite of these encomiums on labor, in prose and verse, we see young men of refinement and ambition still shrink away from it, and go to crowd the ranks of professions already filled to overflowing.

We finally believe that the schools we recommend would do away with these most erroneous tendencies and gradually introduce sounder views into society.

In the mean time, as a means of partial benefit, we recommend the introduction into our common schools, of text-books for instruction in Scientific Agriculture. There may now be a deficiency in suitable works of this kind, but let the community manifest that it wants them, and they will speedily enough spring into existence.

We say then, in conclusion, infuse a genuine love of Agriculture into the minds of our youth, teach them the wonderful qualities which Science discovers even in the clods they tread upon, impress them with a sense of the true dignity of their calling; and the barren fields of Montgomery will be redeemed from their reproach, and our county assume the rank to which her favorable position and natural advantages entitle her.

WM. H. FARQUHAR,
Chairman of the Committee.

BIRD'S-FOOT CLOVER.

FEBRUARY 23rd, 1847.

To the Editor of the American Farmer:

MR. EDITOR,—I see you quote our old agricultural friend John Taylor, of Caroline county, Virginia, to support your views and advice on the action and virtue of Plaster. This carries me back to the pages of that able agriculturist. I have read his treatise of red clover, and felt pleasure at the promise he gave of its virtue and effect. I have felt further delighted to learn from that man's pen, that there was an ample substitute for this great improver, where poverty was too strenuous for its subsistence, and that another species of clover, styled the Bird's foot Clover, that would take up the care of the soil where its impoverishment would deny the cultivation of the other clovers; struck with the promise of this boon, I have thought it not presuming to ask, as a subscriber to the Farmer, of you, for what information can be procured on this clover, in your next number,—what are its advantages, what amount of seed per acre, when sown, where it can be obtained, and at what price.

Yours, very respectfully,
A SUBSCRIBER.

We take pleasure in replying to the inquiries of our correspondent from Milestown, Maryland, with

respect to this variety of the Clover family. There are several varieties of this plant, and hence it is more proper to consider it in the light of a *genus*. They all have long tap roots, which impart to them the capacity of resisting drought to a very great degree. From what we have read in European authors, we should think it a very good substitute for the red clover, on soils so impoverished that the latter would not grow. The late John Taylor, of Caroline, says of it:

"The bird-foot clover as it is called, is one of considerable promise; it will flourish in a sandy soil, is equally improved by the gypsum [as red clover,] affords early and good shade, makes a multitude of seed, and may by a small degree of skill, be kept without being sown. Though it perishes early in the summer, it yet leaves a great cover of dry vegetable matter on the earth, which defies evaporation, until the plough can turn it in. And its dead coat is frequently pierced by other grasses, and sometimes by luxuriant growth of weeds before unknown to the soil, which seem to come forward as witnesses to the fact of its fertilizing the land. This clover is an enemy to wheat on account of its early and rapid growth, and of course ought only to be used to fertilize land in which wheat ought not to be sown. And as wheat cannot be sown in land unable to produce red clover, the *bird foot clover* seems designed to take up the care of the soil, at the point of impoverishment, where the red lays it down. As *red clover* is the best associate of wheat, for the purpose of saving and improving a *good soil*, *bird-foot* is the best associate of Indian corn, for rendering the same services to a *bad one*."

Mr. Taylor does not designate the particular varieties of the bird-foot clover to which he alludes, and, therefore, it is impossible for us at this remote period to supply that deficiency. It is, however, evident from the tenor of his remarks, that he speaks of it solely in the light of an *improver* of the soil, and not as a plant calculated to perform that office, and as being also susceptible of being converted into hay. This is obvious from the fact of its perishing early in summer, and leaving a great cover of dry vegetable matter on the earth. Now if this were the only use of the Bird-foot, we think all its advantages might be gained from a crop of Buckwheat, for that too can be grown on impoverished soils,—and will afford a heavier burthen of grass to turn in, than would the bird-foot clover—like it too, it profits by the application of gypsum—is a great cleanser of soil, derives a large portion of its food, owing to the peculiar structure of its leaves, from the atmosphere—its seed is easily obtained, is much cheaper than that of the bird-foot clover—and by the bye, we doubt whether the seed of the latter can be obtained at all in this country, though it might in England and France.

In Europe there are several varieties, as

1. The common *bird's-foot trefoil*, (*Lotus Corniculatus*), a perennial flowering in the second week of June, and ripening its seed about the end of July, and successively to the end of autumn.

2. The *Lotus Major*. This species is recommended for cultivation, as being excellent for fodder and

hay. It is said however, that while cows and horses eat it, that sheep and swine will not. Its stems are from 1 to 2 and 3 feet high, its nutritive properties stand as 9 to 8 to red clover.

3. *Spreading bird's-foot trefoil* (*Lotus decumbens*) is another variety. It flowers in July. Like the others, is a perennial.

4. *Slender bird's-foot trefoil* (*Lotus angustissimus*) is an annual—flowers in May and June.

There are two other kinds cultivated in France on light soil. But from all we can gather from the books, there is nothing of the clover kind equal to the *Red Clover*, and that the true policy of an agriculturist should be, to bring his land up to a condition of fertility which will enable him to grow it. This may be done by turning under two successive crops of buckwheat, (which may be grown in a single season, applying a bushel of plaster per acre, at the time of each sowing, and then putting on from 25 to 50 bushels of lime, or its equivalent in marl, to the acre. As we have before remarked, buckwheat derives much of its food from the atmosphere, it contains in its straw very large portions of the carbonate and sulphate of potash, the carbonate of lime, and the carbonate of magnesia—all which minerals are essential to the earth, and by its capacity for furnishing shade to the earth is highly conservative—and what is very important, grows well in light soils, and delights in the summer sun. If an exhausted field can be restored in the way we have pointed out, to a state of fertility competent to grow red clover, and consequently wheat—and we believe it can—we hazard nothing in saying, that the cheapness of the mode of melioration should recommend it to general adoption,—for when land may be thus far improved, it may be easily kept in an improving condition, by pursuing a judicious rotation of crops, the basis of which to be a return at the end of every fourth year to clover, an occasional dosing of lime, till the quantity reaches 100 bushels to the acre, the clover always to be plastered at the rate of a bushel to the acre.

As we have before observed, we do not believe that the seed of bird's-foot clover can be obtained in this country, and we suspect there would be difficulty in obtaining it by importation. Our advice, therefore, would be, to test the virtue of buckwheat. The seed of that can be easily procured, and if a bushel of seed be sown to the acre, and ploughed in when first in flower, its good effects would be felt and acknowledged.

THE OHIO BUSHEL.—An act of the Ohio Legislature, passed the 8th of February, 1847, fixes the following weights as the standard bushel of the articles named, when sales are made by the bushel, without special agreement between the parties as to the measurement; that is to say:

Wheat,	- - - - -	60 pounds.
Indian corn,	- - - - -	56 " "
Barley,	- - - - -	48 "
Oats,	- - - - -	32 "
Rye,	- - - - -	56 "
Flaxseed,	- - - - -	56 "
Clover seed,	- - - - -	64 "

THE RAISING & CARE OF HORN CATTLE.

This was the subject considered at the Massachusetts Legislative Agricultural Meeting, held in the State House, on Tuesday evening, the 16th Feb.

Mr. Buckminster expressed the opinion that English farmers in raising stock, had paid more attention to the form and size of their cows than to their milk-giving qualities. He thought we might obtain as valuable cows from our native stock, by care in selecting, as could be obtained from abroad. And, taking Mr. Colman's statement as the basis of an opinion, our best native cows were even better than the English stock for butter; for Mr. C. states, that 16 quarts of milk are allowed in England to produce one pound of butter; whereas 8 or 10 quarts was the usual allowance in this country for one pound of butter.

Mr. Brooks of Princeton, had given considerable attention for some 15 or 20 years, to the raising of stock. His practice was to allow the calf to suck until it was 5 or 6 weeks old. He generally put two calves to one cow. If the calf is suffered to suck much longer than 5 or 6 weeks, he suffers much more in weaning than he does at that age.—Mr. B. usually weaned his calves on milk or milk and water; sometimes on water simply. He thought it best to begin with low feed; for as you begin so you are obliged to continue. He preferred the Ayrshire breed for milk. He had two heifers of this breed which, at two years, yielded 10 quarts of milk a day, 10 per cent. of which was cream, and made one pound of butter. He had remarked often, that cows do not yield butter in proportion to the milk they give. If he wished to make butter, he should choose a cow which gave a moderate quantity of milk. The native cows were the best in his judgment; they stood our cold winters better than the imported breeds. The half breed Ayrshire cows he thought better milkers than the Durhams. The profit on raising steers he thought about the same as on raising heifers. He could get a little more than 12 per cent. on his investments, in either case.

Mr. B. made some remarks on the ability of any one to learn to distinguish the qualities of a cow by examination. He had a very high opinion of a French work, by Guenon, recently translated and published by Mr. Skinner of New York. By the aid of that work, a man might select his stock with almost infallible certainty. He believed he could tell, within a few quarts, what a cow would yield of milk, and within a few pounds, what she would yield of butter. He had not missed in more than 10 instances out of between 300 and 400 trials. He had known one cow that was not dry for fourteen years and had calves every year.

Mr. Denney fully accorded with Mr. Brooks in his estimate of the Treatise on Cattle, by Guenon. He had tested its value by distributing a number of copies among intelligent, practical farmers, and their united report was in favor of the high value of the work. One of them went so far as to say, that a farmer keeping twenty cows could well afford to give \$100 for this treatise of Guenon, if it could not be obtained at a less cost. The work richly deserved the attention and confidence of farmers.

Mr. French expressed his entire confidence in Guenon's Treatise, and thought its introduction among our farmers was destined to work an entire revolution. He mentioned the difficulties which Guenon encountered in getting his work into notice in France.—For some time none of the agricultural

societies would give any heed to his suggestions: but when, at length, one of them was induced to put Guenon to the test, they were perfectly astonished at the accuracy with which he applied his rules for determining the milk-giving qualities of cows.

Mr. F. had little confidence in like producing like in the way of breeding milk cows; there were so many counteracting causes at work, that success in one case out of five was about as much as could be reasonably expected. He had rather take his chance with five calves such as Mr. Brooks could furnish him with, from Princeton, than with the same number of the best imported cattle. He mentioned one English cow brought into Brooklyn, N. Y., sometime since, which yielded 27 quarts a day. A most remarkable case, and one rarely, if ever equalled.

Mr. Merriam had more confidence in the ability of a farmer to raise good milkers than Mr. French had expressed. He believed that there were certain principles which if understood and regarded, would enable the farmer to get like from the like—to get a good milker from a good milker. It was a well ascertained fact that any quality of wool might be bred by regarding certain principles; and he could not see why it should not be equally possible to produce given qualities in neat cattle. You might not get from a first rate milker a calf of the same character, even though the sire was of a good milk-giving breed;—but by taking pains to cross uniformly with good milkers at about the seventh cross he believed that the object would be secured, so that you might calculate on the milking qualities of a heifer, as confidently as on the fleecy qualities of a lamb. He thought that farmers, in selecting their stock, did not sufficiently regard the quality of their forms. The size and general qualities of the cattle should be adapted to the qualities of the farms on which they were to be raised and kept. It was a piece of folly for a farmer on a light, thin soil, to attempt to raise the large and heavy Durhams, for example. The Devons were much more suitable.

Mr. Brooks thought he could produce 3 or 4 good milkers out of about 10; and that, with ten crosses, he could secure uniformly good milkers.

[Princeton, from which Mr. Brooks comes, is famous for good milk chine. This seems to have arisen from the fact that the town has been so fortunate as to have been the home of three of the most famous ever imported into this country,—the Gore bull, (imported by Gov. Gore,) the Admiral, (a gift of Admiral Coffin,) and the Denton. The Gore bull was of the first and purest Durhams, introduced before the breed had depreciated as it was within 40 or 50 years. Much of the native stock in the town has become more or less crossed with this famous blood; so that, after all, the excellence of the Princeton stock should be credited in part, at least, to the infusion of foreign blood.]

Mr. Calhoun, the President of the Society, remarked on one serious drawback in raising good cattle in this country; our farmers have not wealth or time, or science enough, generally, to devote to experiments in breeding cattle. They get a good imported animal into their neighborhood, the breed is just introduced, and the animal is removed from that vicinity, and the work of depreciation immediately commences. Our main dependence must therefore be on what are called native breeds. For an imported animal to remain a single year in a place, was of very little use—no substantial good was accomplished.

The same subject was retained for discussion at the next meeting.

Mr. Denney, Chairman of the committee appointed at the last meeting to report on Mr. Foote's proposition, to petition the legislature for a Commissioner on Fruits,—reported in favor of leaving the matter in the hands of the agricultural and horticultural societies now in existence. The importance of the proposed commission the committee regarded as very great; but the uncertainty of being able to secure Legislative interposition was such, that the committee did not feel prepared to recommend the attempt at present. It was farther suggested, that a small work, embracing the needed information respecting the best kinds of fruits, and the mode of cultivating them, was in contemplation by some persons abundantly qualified for the task.

The report was accepted, will be printed, and called up at the next meeting.—*Boston Traveller.*

ALDERNEY Cows.—In reading the various articles in the *Agriculturist*, on the different breeds of cattle, I have thought that the little that has been said about Alderney cows was not so complimentary to that breed as they deserve. I send you, therefore, a few short notes taken when I was in the island of Jersey, on the coast of Normandy, where the dairy is principally attended to, as well as in Alderney and Guernsey.

Some gentlemen have not thought the Alderney cow handsome; but, in truth, she is the handsomest of cows for the dairy, although she may not till the eye like a thorough-bred Durham, in good condition, so much esteemed by every experienced dairyman; yet there are thousands of families who want one or two cows, rich in milk and butter, mild, gentle, and intelligent, on excellent terms with the milkmaid, and the Alderney, of all others, is the cow. She is well adapted for the lady of a snug rural mansion, and all dairymen would find it to their interest to keep two pure Alderneys to every twelve cows, the advantages of which are well understood in some parts of Scotland, and perhaps a dairy of twenty well chosen animals of this breed would compete with any twenty cows in the United States, where butter of superior quality fetches a good price. In short, the finest specimen of an Alderney is a true emblem of a milch cow, and any person keeping this breed merely for the dairy, who once gets one, feeds and treats her properly, will never be without one.

A good Alderney cow in Jersey is expected to yield 7 pounds of butter a week and many have been known to produce double that quantity for a short period. Some give from 16 to 18 quarts of milk per day, during the months of May and June; and I was told of numerous instances of cows which yielded from 10 to 14 pounds of butter, each, in a week. Major Barns, the Governor, informed me that he had a cow which gave 25 quarts of milk a day: but ordinary cows, did not average more than 10 quarts a day, yielding 7 pounds of butter, each, in a week. It was stated, that, in summer, 9 or 10 quarts of milk would produce a pound of butter, and, in winter, when the cows are parsnip-fed, the same quantity of butter may be obtained from 7 quarts. The general average yield of each cow, old and young, is rather more than 365 pounds of butter in a year, or about 8 quarts of milk per day.*

The cows there are universally tethered, and are moved, watered, and milked three times a day. They are fed principally on lucerne, or clover, but the quality of their butter is never considered so good when thus fed, as when they range on a natural pasture.

The milk, when strained, stands about 10 inches deep in the vessels, till the cream has all risen, which usually occupies three days in summer; and in winter, in order to hasten its rising, the vessels are covered, and placed on the hearth at bed time. Consequently, skimming is never performed but once, and then not before the milk has become congealed or turned sour. In the operation of skimming, the cream is first detached from the edge of the vessel all round, and then is raised up together, as much as possible, and by inclining the whole mass over the vessel intended to receive the cream, the latter will sometimes slip off at once from the coagulated milk. At the bottom of the vessel there is a small hole stopped with a peg, which is occasionally withdrawn in order to drain off the serous or watery portion of the milk, and thereby separate it from the cream.

MISSOURI, Oct. 19, 1846.

CATO.

*In the last Guernsey agricultural report, is an account of a cow of Sir W. Collings which gave from her first calving, in July, 1843, to July, 1845, 804 pounds of butter; while others have been ascertained to give, for a few months, 16 and 17 pounds a week. A fraudulent trade, it is said, has lately been practised in England, in importing the Brittany breed and passing them off for Guernsey cattle, which they somewhat resemble in shape, but are totally different: in dairy qualities. Their milk is thin and blue, while that of the Alderney or Guernsey breed is rich and yellow.—*American Agriculturist.*

THE HORSE.

Every one who likes a horse, and has read Shakespeare, remembers of course his description of the prominent points of a fine horse. That description has been generally admitted to be about as good a one as has ever been written. By some persons, however, it has been condemned as containing quite too much poetry—as being entirely too fanciful for the every day use of plain people. We pretend not to decide this important question, but proceed to give a description in plain prose, that will suit plain people, as well as those who pretend to the highest refinement. We copy it from the articles on the horse, in Mr. R. L. Allen's recent publication on American Agriculture.

Some of the prominent external points of a fine saddle or gig horse are, according to Mr. Allen's estimation, a moderately small head, free from fleshiness; fine muzzle and expansive nostrils; broad at the throat and wide between the eyes, which denotes intelligence and courage; a dished face indicates high breeding, sometimes viciousness; a convex or Roman nose frequently betokens the reverse; the ears rather long, yet so finely formed as to appear small, and playing quickly like those of a deer; and the eyes clear, full and confident, with a steady forward look. Glancing them backward or askance with a sinister expression, and with none or only a slight movement of the head, is indicative of a mischievous temper. The neck should be handsomely arched, and fine at the junction with the head; while the lower extremity must be full and muscular, and well expanded at the breast and shoulders. The latter ought to be high and run well back; the withers strong, firmly knit and smooth; the breast neither too prominent or retreating, too wide or narrow, and supported by a pair of straight forelegs, standing well apart.—The chest should be deep, and the girth large; the body full and not drawn up too

much in the flank; the back short and the hips gathered well towards the withers; the loins wide and rising above the spine; the ribs springing nearly at right angles from the back, giving roundness to the body. The hips ought to be long to the root of the tail, and the latter may approach to near the line of the back, which is a mark of good breeding. Both the thigh and back should be muscular; and between the back, or knee and pastern the leg should be broad, flat and short; the hind legs properly bent, and all well placed under the body; the pasterns of moderate length, and standing slightly oblique; the hoof hard, smooth, round before, and wide at the heel; the frog large and sound; and the sole firm and concave. A white hoof is generally tender, easy to fracture and to lame, and difficult to hold a shoe.

The draught horse ought to differ from the foregoing, in possessing a heavier and shorter neck, a wider and stouter breast, and low withers, so as to throw the utmost weight into the collar—a heavier body and quarters, larger legs and feet, and more upright shoulders and pasterns.

THE HONEY BEE.

BY DR. DRAPER.

A hive of honey of garden bees contains three orders of inhabitants, the external characters of which differ considerably, while their uses and functions in the community are most markedly distinct. The most important, and by far the most numerous order, is that of the workers or working bees, formerly regarded as neuters, but now more properly considered as undeveloped females. The second order is composed of the mobs of the hive, and are called drones. There is usually but one perfect member of the third order present at a time in a hive, and this is the queen bee, the sole and only female of the community.

I shall not enter into a full account of the structure of the bee, but will merely state that the chest is traversed by the oesophagus or gullet on its way to the digestive and other organs situated in the abdomen. These organs consist of the honey bag, the stomach, the wax-pockets and the intestines, with the venom-bag and sting. The construction of the head of the bee is very curious, as it is provided with a double visual apparatus. In front are placed two eyes, consisting each of hexagonal or six-sided plates, studded with hairs to ward off the dust or pollen of flowers; and three small eyes are also to be found on the very top of the head, designed, doubtless, both to heighten the general sense of seeing, which the creatures so peculiarly require, and to give a defensive vision upwards from the cups of flowers. It would be impossible for me, within the limits of an epistle, to recount the many strange things which are recorded about bees. I will, however, mention one. It is known to bee cultivators that they gather a substance called propolis (from the Greek words *pro* and *polis*) before the city, as indicating its use before the hive. This is a resinous substance of a grayish brown color, of an aromatic odor, and is better fitted for cementing and stopping up holes and crevices in the hive than wax, for which purpose the bees principally use it.

If a fly intrudes in a hive, the bees kill it and carry it out—but if a snail or mouse, which is too heavy for them to carry, what think you they do?

In this dilemma, when the offensive object begins to putrefy and fill the hive with a disagreeable smell, they set to work and cover it all over, and every part of it with propolis, which hardens over the

mass, and thus they have a pleasant aroma diffused over their habitation, instead of a fetid odor!

Honey and wax are two important articles, and in a commercial point of view might be rendered very profitable. In one year there was imported into France, beeswax amounting to more than five millions of dollars, and was principally used in the manufacture of wax candles which were burned in the churches. In Hungary, Galicia, and Transylvania, bees are an object of much attention, where many persons derive an income from their production. They possess apiaries containing from 150 to 200 hives. In many parts these animals are left to their own instinct; no other care is bestowed upon them, besides enlarging the hole in the tree where they are lodged, and providing them with a shelf. In Dalmatia, where the small district of Cattaro annually exports about 15,000 pounds weight of wax and honey, the hives are constructed of rough marble, with a movable lid.

Mirulo reports that Varro had yearly for the rent of his bees, a thousand gallons of honey, and that a house in Spain, not having an acre of ground to it, made yearly eighty pounds worth of honey and wax! The Don Cossacks keep large stocks of bees; a few years ago, the number of apiaries was 1,044, which contained 30,201 hives, and produced annually about 298,764 pounds weight of honey and wax.

We are informed by Simond, in his travels in Italy and Sicily, that Sicilian honey is in much estimation, and owing to the great consumption of wax in churches, the proceeds of the bee-hives form a valuable item in husbandry.

In New South Wales, the product of the bee is becoming an object of attention, for Mr. Cunningham, in his work on that country, says: "A number of swarms have, at different times, escaped into the woods, and the climate being exceedingly favorable to bees, we may expect soon to see honey and wax added to our list of exports."

From a late London Paper.

THE TOBACCO DUTIES.

A deputation of the associated Manufacturers of Tobacco, accompanied by Dr. Bowring, M. P., Mr. Henry Berkeley, M. P., Mr. G. H. W. Hencage, M. P., and Mr. Ludlow Bruges, M. P., waited upon Lord John Russell, at his house in Chesham-place, on Saturday, for the purpose of calling his attention to the state of the Tobacco trade, and the injurious influence of high duties on the interests of the trade and on the comfort and morality of the public.—The deputation consisted of the following members of the trade: Mr. John Lloyd of the firm of J. & F. Lloyd and Co.; Mr. Williamson and Mr. Back, of the firm of Taddy and Co.; Mr. H. O. Wills, of the firm of Ricketts, Wills & Co., Bristol; Mr. Von der Heyde; Mr. Thomas Huxley; Mr. Charles Lloyd, of the firm of Wishart and Lloye; Mr. Robert Roberts; and Mr. Paul Anstie, of the firm of P. & E. Anstie, of Devizes.

Lord John Russell was accompanied by the Chancellor of the Exchequer, and received the deputation with much courtesy.

Dr. Bowring referred to the committee of the House of Commons on the tobacco trade, which sat in 1844, and to the important and conclusive mass of evidence which was given before that committee. It was shown that of the number of seizures of contraband goods made by the customs, five sevenths of the whole consisted of tobacco, and that the convictions

for the crime of smuggling had increased during the 3 years previous to January last more than two hundred per cent.; that the duties on tobacco are so enormous, (varying from 800 to 1,500 cent. on the value of the article,) that the temptation both to smuggling and adulteration is so great as to forbid the hope of collecting the duty; that the evidence proved such an amount of these practices as to show that the power of the revenue was entirely defeated. It was shown that a quantity fully equal to that on which duty had been paid was introduced fraudulently and consumed without payment of duty, to the injury of the fair trader. The Board of Excise produced chemical evidence, with the intention of showing that they had the means of discovering adulteration by analysis; but in that respect they had entirely failed. The evidence went to show that the expenses attending the evasion of the duty are so great that a smuggler could not introduce tobacco under a cost which would render it unprofitable to him to run his goods if the duty were reduced to 1s. a pound.

Mr. John Lloyd said that the trade had been complaining of the operation of duties for many years, commencing soon after the close of the war, when intercourse with the continent became open; that the stringent resolutions of the Excise survey—and the trade had assented to the most stringent regulations the Government could devise—having altogether failed of their intended effect of preventing smuggling, they were abandoned in 1840; that the rate of duty so much exceeded any other article in the tariff that even on that ground tobacco had the first claim for reduction. And now the duties on other articles having been reduced, the tobacco duties had become relatively still higher. Thus all the operations of the smuggler had become concentrated on tobacco. Formerly, his venture consisted of brandy, silks, and other highly-taxed foreign articles. Now tobacco forms the whole venture. That the low prime cost of the article, and the consequent enormous profit realized had led to such an amount of smuggling that the condition of the fair trader was now worse than at any former period. That this duty falls heavily upon the working classes, inasmuch as eleven-twelfths of the revenue derived from tobacco was derived exclusively from the consumption of the working classes. Mr. Lloyd also referred to the general views of the subject on which Dr. Bowring had touched.

Mr. Paul Anstie said that, after Mr. Lloyd's statement, he was only anxious to prove that the calculations which the trade had embodied in the papers they now left with the Chancellor of the Exchequer were strictly based on evidence given before the tobacco committee, and upon parliamentary papers since published. They had taken the proportion which had existed between seizures in London in the year 1843 (the only clear year after the passing of the last tobacco act) and the whole of the seizures in the United Kingdom. They had then taken the positive testimony given before the committee as to definite amounts introduced into London by smuggling during that year. The witnesses who had spoken to quantities of smuggled leaf tobacco within their own knowledge were only six, and the total quantity so ascertained had been multiplied only by three—an estimate believed to fall far short of the truth. This remark applied also to the calculation of the quantities of smuggling foreign manufactured tobacco, in which case the quantities deposited to by three witnesses were multiplied only by four. The same proportion which existed between the amount seized in

London and in the whole kingdom in 1843 was applied to ascertain the whole of the quantities smuggled; and the result was that, if in 1834 the duty had been reduced to 1s. per pound on leaf, 5s. on foreign cigars and cheeroots, and 1s. 6d. on other foreign manufactured tobacco and snuff, the revenue from tobacco would have been as great taking adulteration also into account, as now derived from the present high rate of duty. Several official papers had been published; when Sir R. Peel introduced his last tariff, the associated manufacturers complained that he had taken spirits instead of tobacco, the latter being most largely smuggled, and was subject to the highest rate of duty. They have evidence in these papers that the anticipations they then expressed had been fully realized. Parliamentary returns show that tobacco now constituted five-sevenths of the smuggling, and that the enterprise of the contraband trader had been transferred to tobacco. The effect of the reduction of the duty on spirits had been a positive increase of revenue. This would certainly occur in the case of tobacco.

The deputation then retired, no intimation, so far as we have understood, having been given of the intention of Government in reference to the tobacco duties.

THE AMERICAN FARMER.

BALTIMORE, APRIL, 1847.

TO THOSE IN ARREARS.—We are very loth to introduce anything into our pages in the shape of a dun, but we must remind those who have not complied with our terms, which are \$1 per ann. payable in advance, that the subscription year is far gone; those who may have neglected this little matter, can rectify their error and make amends by remitting at once, and include in their remittance the pay for the ensuing volume.

NOTE—The author of the essay on the use of LIME, which was commenced in our March No., obtained the copy for a revision thereof, and not having returned it in time, for this month, is the cause of its non-appearance.

We refer farmers and others to the advertisement of Mr. Smull, offering to furnish boilers, &c. These boilers have been introduced into many public institutions and on private farms, and innumerable testimonials can be furnished of their great value, in the saving of fuel, and convenience for steaming food for cattle, &c.

NOTE—We are indebted to Mr. Coad, of the H. of D. and Mr. Naill, of the Senate of Md., for copies of the Report of the Committee on Agriculture, in relation to the appointment of an Agricultural Chemist, which we will notice more at length hereafter.

Also to Gen. Chapman, of the H. of R. for a copy of his speech on the Tobacco trade, containing much valuable information, for which he will please accept our thanks.

SEEDLING POTATO.—We have received from Mr. Joseph Halsberger, of Georgetown, Kent Co.

Md. a bag of Potatoes, raised by him from the seed or apple, of the third year's growth. They are perfectly sound, of good size, with white flesh, and somewhat of a kidney shaped. We have distributed these potatoes to sundry of our friends, and have a few more left to dispose of in the same way.

MARL.—We have also received from the same gentleman, a specimen of Marl, found on his farm, at the head of a fresh water creek. He considers this marl as valuable as lime, and is finely enriching his farm with it. It shows well the first year it is put on, and has continued to produce as good an effect upon the crops the third year as it did the first. Bones of fish, (some of them apparently of sharks,) and oyster and sea shells of various kinds, are found on the tops of the marl bed, but the underneath marl, which is without any shell, is considered the best. There is a great quantity of excellent marl in different parts of Kent Co.

JERUSALEM ARTICHOKE.—We have been asked frequently by our friends, where they could procure the real Jerusalem Artichokes. We have made enquiry upon the subject, and are now enabled to supply them them at \$2 per bushel.

GUANO.—We regret to learn that the dealers in this article have considerably increased the price recently. Peruvian had been selling at \$41 50 per ton, but is now at \$50. The cause may have been produced by the rise in the price in England. From the Sheffield & Rotherham Independent, of Feb. 27, received by the *Hibernia*, we make the following extract:

Corn Exchanges.—A good stroke of business has been done in the Guano trade since our last, and the stocks in the country having been considerably reduced, prices, as foretold a fortnight ago, have advanced. All qualities have risen from 20 to 30 shillings per ton, excepting Saldanha Bay, which is quoted only 10 shillings per ton higher.

ST. MARY'S AGRICULTURAL SOCIETY.

The farmers of St. Mary's Co. Md., have taken the preliminary steps to the formation of an Agricultural Society—A meeting was recently held at Leonardtown, when, on motion, Col. B. I. Heard was called to the chair, and George Combs, Esq. appointed Secretary. After a few remarks from the Chairman, explanatory of the object of the meeting, a committee, composed of three gentlemen in each of the districts of the county, was appointed to obtain the names of those willing to become members of the Society. Col. B. I. Heard, H. G. S. Key, Dr. William Thomas, Edmond I. Plowden, Dr. J. L. Delaney and Richard Thomas were also appointed a committee to draft a constitution for the regulation and government of the Society to be reported to an adjourned meeting. With such men as we here find to lead the way, we have entire confidence that the undertaking will be fully successful.

Since the above was in type, we have received from a gentleman of St. Mary's, a letter on business, from which we make the following extract— We trust that the fears of our correspondent will not be realized, but that the spirit which is now awakened in that venerable county, will induce her intelligent sons to persevere until they shall have established their society on so firm a foundation, that it will ere long rival that of their neighbors of P. George's:

"It will be gratifying to you to know, that we have had two meetings this spring to form an Agricultural Society—it is now adjourned to the second Tuesday in April, when I hope public spirit enough will be evinced, to ensure its organization and success. We are certainly more industrious, and the public mind is more on the enquiry for agricultural improvement, and much of our county begins to show that dear old grateful mother earth is the most grateful for any culture or nourishment we may extend to her, yet we are behind hand, and I fear that few, with all our good social qualities, will be found duly to appreciate the blessings and advantages of such an association—I judge from the past, as we suffered two such to die; still let us hope, as your paper is now in circulation, and in charity to all we may presume its instructive pages are read, which will certainly dispel the idle prejudice against 'book farming,' &c."

THE GROWING WHEAT CROP.

A letter from one of the most intelligent farmers in the upper section of the State, to the Editor of the American Farmer, dated 26th ult. says:

"The growing crop has passed through a severe ordeal during the past winter, owing to the want of its usual covering of snow. In low situations it has been thrown out by frequent freezings and thawings, and in almost all situations, is essentially injured in that way, which, superadded to the injury done it in the fall by the fly, and from the effects of which, a recovery is very rare, renders the prospects of a crop exceedingly doubtful. A drought during April, or a spring attack of the fly, would at once be destructive of a crop, the crippled condition of which will not be fully realized until it begins to ear about the 1st of June. I wish to be understood as speaking of the crop in general, in all the various soils; some fields now promise tolerably well. The character of the weather during the winter, has been pretty much the same throughout the United States, which is unusual—consequently the crop will be much the same throughout, unless the spring should be different in different sections of the country.

"Looking to the past as the criterion to judge of the prospects of a crop, I would say it is of the most gloomy character. Let us hope, however, that the form of the weather will be favorable, and an average crop at least the result. Your subscribers ought to turn to Mr. Nauil's communication in the July number of the American Farmer of 1845, and I hope he will be observant of the progress of the crop from 'seed time to harvest,' and let us hear from him upon the subject."

CHARCOAL.—An esteemed correspondent in the Old Dominion, writes us as follows:

"The several articles in the late numbers of the Farmer, on charcoal, are of great value, especially Dr. Gardner's. The application of chemistry to agriculture is to revolutionize the world. Agriculture is the foundation of a nation's wealth; it feeds her population, and gives employment to manufactures and commerce."

THE ACTION OF AND ASTONISHING EFFECTS OF GUANO.

We have spoken of this manure in another article, and now purpose stating a few facts which have come to our knowledge from a source entirely to be relied upon.

Fact No. 1. Our informant assured us that, last season, he planted $8\frac{1}{2}$ bushels of potatoes, and harvested but $3\frac{1}{2}$ bushels. All but a very small portion of the patch was manured with barn-yard manure—less than two rows were manured with Guano. The potatoes on the part manured with the former, all rotted in the ground—those on the part manured with Guano proved to be *sound potatoes*; and, indeed, the guanoed portion was the only part of his patch from which he gathered any roots.

Fact No. 2. He sowed a patch of buckwheat last season, intending to manure the whole with Guano, as the ground was very poor, but not having enough to go over the whole, a strip, from necessity was left without any. His crop, from the part guanoed, was a good one, grew breast high, and seeded well, while the part which had none on it, was scarcely worth reaping.

Fact No. 3. A neighbor of our informant, ploughed up last spring an old worn-out field, and not having other manure, procured as much Guano as he thought would give it a dressing of 400 lbs. per acre. The Guano did not however, hold out, but left a few acres unmanured. After ploughing his ground and harrowing it, he sowed his Guano thereon, harrowed it in, then marked off his land and planted his corn. All was tended alike. The part on which he had spread the Guano, yielded at the rate of 8 bbls. per acre of good merchantable corn—that on which none had been spread, produced but from $1\frac{1}{2}$ to 2 bbls. of nubbins, per acre.

Fact No. 4. An acquaintance of our informant bought, in his neighborhood, a farm consisting of upwards of 200 acres, for \$1200. This farm had been worked without manuring until every thing partaking of the character of fertility had been extracted from it, as may well be imagined from the price we have mentioned above. In the opinion of the owner of the farm in question, without manure, it would not have yielded 6 bushels of wheat per acre; and this opinion was corroborated by that of our informant. In the fall of 1845, the present proprietor came into possession of his farm, and having faith in the virtues of Guano, purchased a sufficient quantity to enable him to spread on each of 100 acres thereof, 350 lbs. of that manure, which he caused to be ploughed in, and then sowing his wheat, harrowed the latter in. The product was 25 bushels of good wheat, per acre, from the sale of which he was not only enabled to pay the whole of the purchase money for the entire farm, and the cost of the Guano, but to have a surplus left. These results are actual, and proceed from the use of this manure by practical, not theoretical farmers;

therefore are to be confided in, and will not fail to have due weight with all agriculturists who look with a favorable eye upon such manures only, as tell in the return of money into the purse; for after all that may be said upon the subject, it is only such that should engage the interest of agriculturists who desire to live by their vocation.

The manner of applying *Guano*, as practised by these two farmers, is worthy of note. He who used it on his *corn crop*, harrowed it in, after first fallowing his ground—while he who used it on his *wheat-crop*, ploughed it in—both having previously spread the *Guano* broadcast on the ground. Either of these modes of using it, has always struck us to be sanctioned by common sense and reason, the only safe guides in the common affairs of every day life. Either of these plans have this to recommend it, that, to a certain extent, it prevents the loss of the *ammonia*, which is, in five different forms, found among the elemental constituents of *Guano*. The application of *Guano* as a top-dressing, uncombined with gypsum or the dust of charcoal, we certainly never would recommend, because, without one or the other of these substances to give fixidity to the *ammonia*, much of that valuable substance would be lost by exhalation, and by the bye, the *ammonia*, in its various forms, found in the *Guano*, may be said to be the nutritive parts of it.

While we would conjure all agriculturists to husband every thing on his farm capable of being converted into manure, we would be permitted to express our sincere belief, that it would be cheaper to buy *Guano*, than to haul out the manure from their barn-yards. And that we may not be thought out of the way, we will state, that it will take two hands, two horses and a double horse cart, two days to haul out and spread such manure over 1 acre of ground, whereas, one man can sow the requisite quantity of *Guano* over 8 acres in 1 day.

Having come into the possession of the foregoing facts, in a shape so unquestionable as to entitle them to our implicit confidence, as corn-planting time is coming on apace, we have felt it due to our numerous readers to state them, in order that they may have an opportunity of benefitting themselves by them.

LANDLORDS AND TENANTS.

 The communication of "J. B. S. Jr.", upon the subject of "*Tenants and Landlords*," will commend itself to our readers by its good sense,—and we sincerely hope that it may lead to such investigations of the relative interests of *both landlords and tenants* as will ultimately result in a change of the present wretched system of renting farms. The *one-year tenure system*, under which they are let, is alike destructive to the land and the interests of owner and tenant. In England, leases are granted for 14, 21 years, for one, and two lives, the consequence of

which extended terms, is, that tenants, feeling they have a guaranty of possession, do not hesitate to invest their means in such manures as impart permanent improvement to the soil they occupy, and that, at the expiration of their leases, the farms are really better and of more value than they were when they first entered upon them. But here, in consequence of the shortness of the term for which farms are let, no tenants are, in fact, justified in expending either their money or their labor in any thing like improvement, as they have no security, that their landlords will not at the end of the year, avail themselves of the increased value of their farms, exact additional rent. And hence it is, that tenants, from the mere force of circumstances, act upon the *killing system*, of taking all out of and putting nothing in the soil—a system which, in a few years robs the land of every vestige of fertility.

TENANTS, vs. LANDHOLDERS.

NEAR EASTON, Md., February 24th, 1847.

To the *Editor of the American Farmer*:

SIR—Having moved from the farm which I occupied last year, I write to inform you of my present address. I am afraid my negligence in not making you aware sooner of my change of residence, has caused me the loss of my January No. of your, to me, almost invaluable publication. I commenced farming last year; inexperienced, I rely solely on the *Farmer*, as my adviser, and find on the reception of each No. that my trust is not misplaced.

A tenant myself, I wish through your columns to say a word to landholders, with a word of advice to tenants. It is too often the case on this Shore, (and such may be the case elsewhere,) that the same farm is occupied each year by a different tenant, the several tenants either not giving satisfaction to the landlord, or themselves dissatisfied from various reasons. This system, (if it may be so called,) leads to the following effects,—the impoverishing of rented lands, the decay of buildings, and the consequent depreciation of such lands in value. What tenant, even though he may pay a grain rent, whose stay on a farm is only made certain for one year, whose means are small, and who has all his hands to hire, can or will incur the expense necessary to the improvement of the soil, even though natural resources for such improvement may be abundant and convenient, when his stay is so very uncertain, depending often on the arbitrary caprice of his landlord. Though it is but justice to say, that tenants are often more capricious than their landlords, and in seeking to better themselves by a change of situation, repent at leisure, their love of change. I would say to landlords, rent your lands at fair grain rent; if you are not satisfied with your first tenant, if he is indolent, unskilled, or dishonest, turn him off, and so proceed till you meet with one who suits you; try him thoroughly, by renting to him year by year, till you are fully satisfied with his qualifications, then lease him your land for a term of years, as I said before at a moderate grain rent. If you have not been deceived in your man, he will set himself seriously about improving, because he has now the certainty of reaping the reward of his exertions; your land instead of depreciating in quality each year, by hard tillage and little manuring, will each year increase in value, the crops will be larger, and your share will consequently increase in quantity.

To tenants I would say, consult your own interests by endeavoring to gain the enviable reputation of good farmers; be as careful of the interests of your landlord as of your own, they are in a great measure the same, and you will find that you can always succeed in renting land on fair terms, and instead of having each year to incur the loss and expense of moving, and that too, at a most inclement season of the year, you may remain on a farm, the soil and mode of culture of which you are acquainted with, (for a knowledge of these must be acquired before you can make good crops,) and which has insensibly become endeared to you as a home.

J. B. S., Jr.

OREGON AND BADEN CORN.

CAMBRIDGE, March 12, 1847.

To the Editor of the American Farmer :

Sir :—Mr. Ellsworth sent me, the year before last, a few grains of Oregon Corn. I have grown it and have a high opinion of it—it is a yellow corn and has a deep grain, and I think it will shell out very heavily. Mr. Ellsworth wrote that he understood it would shell seven bushels to the barrel,—I have not made this experiment of it, as I did not consider it safe to shell it, so long a time before planting.

The "Baden" has been my favorite for many years as the most productive and most heavy of any kind I have ever tried. I mean the pure, white, flinty Baden—there are several varieties passing under that name very inferior to that which I allude to.

The drought of last year came at a crisis to injure materially my crop of corn, which up to that moment had been very fine—hence neither my Baden, nor Oregon had a fair chance to be tested, for their respective merits—but, under circumstances as precisely similar as possible, the "Oregon" corn produced twenty per cent. more than the "Baden";—upon two measured acres, promiscuously taken in the field, and line by line of each other—in equal soil—equal improvement and equal cultivation, and planted the same hour, and in the same manner—that is in drill, as I have done in preference for many years, I made fifty bushels of the Oregon and forty of the Baden—that is ten barrels, and eight barrels, for I have not shelled them,—and I count them at five per barrel as usual.

Accept my thanks, and my gratulations for the very able manner in which you are conducting the "American Farmer," which, candidly and sincerely I say it, without a disposition to flattery—is in my opinion one of the ablest and best agricultural journals in our wide country, whether we regard its *selections* or its *editorials*. Respectfully,

JOSEPH E. MUSE.

THE FARMERS' LIBRARY.—The March No. of this valuable work, edited by our old friend Skinner, was duly received, and is filled as usual with interesting and instructive matter, as will be seen by the annexed table of contents. This work should be in the library of every Farmer and Planter—we consider it creditable to our country that it produces such a work, and the talent, labor and expense which are evidently bestowed on it, should induce all who can afford it, to render it their support. The following from the pen of the Hon. Mr. RIVES, late Senator from Virginia, in the Congress of the U. S., will

show in what estimation the "Farmers' Library," is held by that eminent statesman and agriculturist.

Extract from the Hon. W. C. Rives, Castle Hill, 22nd January, 1847.

The Farmers' Library and Monthly Journal of Agriculture, in its regular periodical visits, is always hailed as a most welcome guest here. I wish I had more time to profit of the rich stores of intelligence and instruction with which it always comes fraught. I never fail to run over its pages with more or less attention, according to the leisure which other engagements happen to leave me. Both in its solid and agreeable features, it is by far the best publication devoted to the interests of agriculture, which has appeared in my day. In the reprint of the great standard works, such as those of Thaer, Stephens, &c., it puts us in possession of the great body of systematic husbandry, both scientific and practical, at an infinitely less cost, than it could be obtained, by any other means, while in the department of the monthly journal, through the medium of well selected essays and the spirited and judicious contributions of the editor and his correspondents, we are initiated in the most agreeable manner, into all the useful improvements and suggestions of contemporary zeal, intelligence, and enterprise. I most heartily wish you the success due to your enlightened and patriotic labors, and I should consider it a happier omen for the country, if the Farmers' Library and Journal were made, as you propose, a regular adjunct to the systems of popular education in the several States. There is a remark of Dugald Stewart in his dissertation on the progress of philosophy, since the revival of letters in Europe, which I had occasion to quote, in a discourse of which I sent you a copy some time ago, that may be justly appropriated in recommendation of your object,—"at all times, and in every country," he says, "the existence and demand for books on agriculture, may be regarded as one of the most pleasing symptoms of mental cultivation in the great body of the people."

To J. S. Skinner, Esq., Ed. *Farmers' Library*.

CONTENTS OF THE MARCH NUMBER OF THE FARMERS' LIBRARY.

Engravings and Illustrations :

Lanarkshire, or Wilkie's Plow, (steel;) Ayrshire Bull Geordie, (colored,) property of R. L. Colt, Esq. of Paterson, New-Jersey.

The Lothian Draught-Horse Collar and Haims; Forfarshire Draught-Horse Collar; English Draught-Horse Collar; Swing-Trees for Two Horses; Do; for Three Horses; Do. for Four Horses; Do. also for Four Horses; An Example of Bad Plowing; Ransome's F F, or Bedfordshire Plow; The Trench or Subsoil Plowing; The Deanston Subsoil Plow; The Methods of Stripping the Ground of Turnips in any given proportions; The Method of Pulling Turnips in Preparation for Storing; Instrument for Topping and Tailing Turnips, made of part of an old Scythe Reaping-Hook; Another Instrument for the same purpose, made of a piece of an old Patent Scythe; Mode of Topping and Tailing Turnips; The Triangular Turnip Store; White-Globe, Purple Top, Swedish and Aberdeenshire Yellow Bullock Turnips; Treatment of the Grape-Vine illustrated.

Farmers' Library.

STEPHEN'S BOOK OF THE FARM—(continued)—
26. Yoking and Harnessing the Plow, and of Swing-Trees (with Notes by J. S. SKINNER, Editor of The

Farmers' Library;) 27. Plowing Stubble and Lea Ground; 28. Trench and Subsoil Plowing, and Moor-Band Pan; 29. Drawing and Storing Turnips, Mangold-Wurzel, Cabbage, Carrots and Parsnips (with Notes by J. S. SKINNER.)—all profusely illustrated.

Monthly Journal of Agriculture.

Explanation of the Plates accompanying the Number.

Massachusetts Agriculture—being a statement of the action of the ‘Massachusetts Society for Promoting Agriculture,’ with comments thereon.

Great Improvement in Making Bricks—by a machine invented by Alfred Hall of Coxsackie, moulding 12,000 bricks per day with ease.

Agricultural Education—Progress of Public Opinion—Indications of a favorable change—Action upon it in the Maryland Senate.

Cheese Dairies in Virginia—Major Stevens's Recipe for making Welsh Rarebit—Letter from R. L. Colt, Esq. of Paterson, relative to M. Guenon's work on Milch Cows.

Softening Dew and Water-rotted Hemp—Inquiry by a Manufacturer of Paterson, N. J.

The Plow, as illustrative of the Progress of Agricultural Improvement—Objections to Money Premiums.

Cisterns—Items respecting their Dimensions, &c.
Recipe for preventing Hares and Rabbits Barking Trees.

Dibbling Wheat—with interesting Remarks on the change in the character of Wheat since the first notice of it in the Divine Records—Oregon Corn—English and American Experiments.

Migration from New-York to Virginia—Letter from S. S. Randall, Esq.

Cuba Tobacco—proposed to be cultivated in Virginia.

Pennsylvania Farming recommended to be practiced in Maryland, naturally a better Wheat country.
Notice to Correspondents—one and all.

Vegetable Food—Value of the Inorganic Ingredients of Vegetable Food, and particularly of the Phosphates—Letter from J. E. Teschemacher, Esq. of Boston.

Barns—Plan and Dissertation on the best sort of barn under given circumstances.

The Green Twig Peach.

Native Grapes of Texas.

Long Preservation of Apples in England.

Grapes—varieties of.

Shepherds' Dogs—How trained.

Sheep Husbandry in the South, by Henry S. Randall, Esq.—Letter IV. The Adaptation of the Soils, Herbage, &c. of the Southern States to Sheep Husbandry, continued. 2. Of the Middle or Hilly Zone. 3. Of the Mountain Region.

Artificial Incubation.

The True Cotton Region—Last Letter of ‘S. B.’
Manufacture of Sugar—Derosne and Cail's System explained—Translation from the French, giving a full description of the different processes.

Cultivation of the Vine—concluded from the last Number, illustrated.

Prices Current for the preceding month—carefully corrected.

Subscription price \$5 per year, in advance.

GREELEY & McELRATH, Publishers.

 The Farmers' Library and Monthly Journal of Agriculture from July 1845, to June 1846, are now for sale in two large octavo volumes, neatly bound and lettered.—Common School Superintendents and Trustees are requested to examine the work.

The Farmers' Library, Volume I, contains Petzholdt's Lectures to Farmers on Agricultural Chemistry, complete, and the celebrated work of Baron Von Thaers on the Principles of Agriculture, also complete. These two works are bound up together in one volume.

The Monthly Journal of Agriculture, Vol. 1, is bound to match the Farmers' Library, and contains various useful articles on various branches of Practical and Theoretical Farming, embellished with numerous Engravings. The price for the two Volumes complete is \$6 50.

 Subscriptions received at the bookstore of the publisher of the “American Farmer,” where the first volumes bound, are on sale at publishers prices—also Guenon's Treatise on Milch Cows, &c. &c.

THE COTTON CATERPILLAR.—In the Charleston Mercury of a late date, we find a letter from the Hon. WHITEMARSH B. SEABROOK, of Edisto Island, in regard to the communication of Mr. SPALDING, upon the subject of the cocoon of the Cotton Caterpillar, from which we make the following extracts, believing that they will be read with interest, by our planting friends. Mr. SEABROOK remarks that “it would seem that from analogical reasoning alone, he (Mr SPALDING) had inferred, that every one of this great foe of our favorite staple did not annually perish,” and then adds:

“In my memoir on the Cotton Plant, I expressed a similar opinion, and adverted to facts which seemed to confirm it. About a month ago, an accurate observer of this place stated to me, that a larva had been found in the Cotton he was then preparing for market, which, however, in consequence of a very sudden and unfavorable change in the weather, survived only a few days. Subsequently he put into my hands two insects about a half an inch long, and of a dark dirty color, discovered in the same situation as the first. These, my friend said, differed from each other, and in some respects were unlike the one he had previously invited my attention to. After a minute examination, I arrived at the conclusion, that the larger was an offspring of the *Noctua Xylina*. Both were replaced in their downey beds, and locked up in my secretary. A week afterwards, on unfolding the mass of Cotton to exhibit them to a visitor, the insect, my unscientific eye had pronounced of pure blood, was missing. It escaped, no doubt, while I was engaged in writing. To me this was a matter of deep regret, for on the preservation of its life depended the solution of a problem which, as yet, is involved in mystery. That a few nymphæ survived the winter, I never questioned, but the existence of larvae in that season, I had supposed impossible. In having lately seen a Caterpillar of the *Noctua Gossypiperde* tribe, I may then be in error; for although the enemy is no stranger to me, yet, from my acquaintance with entomology, I am unable to speak with authority.

“In the hibernation of the cotton moth, facts do not warrant me in believing, still as the evidence of Mr. Spalding is conclusive, as to the existence of pupæ at this time, the planter should be aroused to the adoption of prompt and active means to discover them in their places of concealment. In certain locations, in the immediate vicinity of the ocean, it is nearly positive that he will be rewarded for his search.

“Among the measures now to be resorted to by the

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grower of cotton, Mr. Spalding recommends the application of fire to the vegetation surrounding the last year's field. On my part, I would advise a thorough inspection of the cotton and other houses on the plantation, especially those parts of them where the highest and most uniform temperature is likely to be preserved. From their number last season, and the mildness of the winter now nearly closed, we have substantial reasons for thinking, that the enemy will reappear, and very early too in the summer. It is consolatory, however, to know, that its depredations may neither be extensive nor alarming. By the state of the atmosphere in May, June, July, and August, on which its multiplication depends, we shall be enabled to determine whether the desolation scene of the last year is again to be witnessed."

The foregoing suggestions are well worthy of note, and we would be most happy if some of our intelligent planting friends would pursue the subject.

POUDRETTE ON INDIAN CORN.

In the February number of the *Albany Cultivator*, we find an article with the above heading, signed "Pennepack," and dated, "Lower-Dublin, Pa., December 19, 1846," treating upon the value of this manure, and detailing some experiments. We make some extracts from the article.

Poudrette as a Manure.—In order to give Poudrette a fair trial, I selected a part of my field, an acre of ground, and manured one half of it in the hill, with five bushels of poudrette, manufactured in Philadelphia. The rows and hills were each four feet apart. The ground selected was as near as I could judge, of the same quality; if there was any difference, it was in favor of that part not manured. The soil was a light micaceous loam, but quite thin, as you will see by the yield. It came up finely; the corn on the part that was manured, grew vigorously, keeping far ahead of the other, throughout the season, and ripening at least one week earlier. When harvested, the part that was manured, yielded thirty-three baskets of ears, making 16 bushels of shelled corn, and the other half only 17 baskets or 8 bushels—leaving me 6 bushels of sound Corn to pay for the poudrette. The Dr. and Cr. account would stand thus:

8 bushels corn at 60 cts. per bushel, is	\$4.80
Extra Fodder—(there was at least double the quantity on this part that there was on the other,) 1.00	
	5.08

Dr. To 5 bushels poudrette, 35 cts. is	1.75
Spreading the same,	0.10
Husking, hauling, & shel. 8 bus. 3c.	0.24
	— 2.09

Gain by using this manure (per $\frac{1}{2}$ acre,) \$3.71

A part of the same field, was manured, in the same manner with guano, and at the same cost per acre. One barrel of guano was mixed with two of unlimed ashes, and the same quantity of clear sand, and spread on one and an half acres of ground. This part neither grew so well, nor did it yield so well as that alongside of it, which had been manured with poudrette. Although we took great pains to sift and mix it thoroughly, yet many of the hills were killed, and some so stunted that they did not recover throughout the season.

One of my neighbors, seeing what poudrette had done for me, for two years in succession, on my wheat crop, planted some two or three acres, of as poor land as you could find any where, (in fact the

soil had been entirely washed away) with what we call Canada corn, and manured it in the hill with this manure; a part he left unmanured. On the first part he had a fair crop; but upon the other, there was not enough, I had almost said, to pay him for his seed, certainly not for his labor.

What these manures may do, when used upon soils of a more productive quality, I do not know, but I am well assured, that when used upon thin soils, this is a most valuable manure; and those of us in this neighborhood, who have used it, in this manner, firmly believe that we receive the price of our labor and expenses, in the increased value of our provender alone. The coming season I shall plant my corn on soils of various degrees of fertility, and I shall then test the matter more fully.

GREAT PRODUCTS.

At a recent meeting of the N. Y. State Agricultural Society, it was stated that they have succeeded in raising over 90 bushels of wheat to the acre in England. What is more surprising to many, however, is, that the land upon which it was grown, contained only $2\frac{1}{2}$ per cent. of vegetable matter. The peculiarity about it, was, that it contained the mineral elements which go to make up the grain of wheat in nearly or quite the same proportions in which they are contained in the grain itself. It is necessary to furnish the soil with the materials in many cases, before it can manufacture the product. And one of the members of the Agricultural Society is very strenuous in his argument that the labor of 500,000 individuals is annually thrown away in this country in trying to make different grains and vegetables out of materials which God never intended they should be made out of. He means to inculcate by this, that it is necessary to know what the soil contains, and what to furnish it with in order to produce a good crop, and get the full benefit of labor.

An individual in the county of Monroe, N. Y., kept 60 cows, during the past season in a thriving condition upon 20 acres of land. Some may be disposed to question the truth of the statement. But it comes well authenticated, and to one acquainted with the deep rich soil of some portions of the western counties of New York, it is not incredible. The method pursued by him is noticed in the *Cultivator* for January, and is as follows.

Five acres of Clover, cut three times	57 tons.
" " Oats, " twice	41 "
" " Corn, " "	84 "
" " Corn and Pumpkins,	73 "

255 "

It will be seen that the 20 acres were divided into lots of five acres each, and averaged about 13 tons of green food per acre. The same individual is in the habit of growing large quantities of Carrots for stock, which sometimes produce at the rate of 12 or 1300 bushels to the acre. Had the latter been substituted for the oats above, the average yield would have been much greater.

CHARCOAL.—Mr. Alex. Coffin says, in the *Cultivator*, that he put about a peck of charcoal around each of three peach trees in the spring of 1844, which greatly improved the bearing of the trees as well as the quality of the fruit. Those around which no charcoal was placed bore no good fruit in the years 1845 and '6, and if nothing be done to prevent it, will soon die.

THE COTTON CROP.—We find in the *Augusta Constitutionalist*, the following statement of the comparative receipts of cotton, the present compared with last year:

EXCESS OF RECEIPTS OVER LAST SEASON, AT
Charleston, 113,581 bales, av'g 360 lbs. 40,889,160 lbs.
Savannah, 94,041 " " 415 " 37,612,015 "

Total,	206,622 bales	78,501,175 lbs.
DECREASE AT		
N. Orleans,	161,322 bales, av'g 450 lbs.	71,594,900 lbs
Mobile,	67,046 " 489 "	32,785,484 "
Florida,	3,190 " 415 "	1,324,265 "
Virginia,	1,121 " 360 "	403,200 "
N. Carolina,	923 " 860 "	335,580 "

Total 233,612 bales. 107,443,729 lbs

The *Constitutionalist* says, "it will be seen that the only increase in receipts is at Charleston & Savannah (206,622 bales) whilst the falling off at New Orleans, Mobile, Florida, Virginia and North Carolina, exhibits a deficiency of 233,612, making the decrease in this year's crop, compared with last 26,990 bales.—By the addition of the receipts at Texas, (last year's not being included in our tables) the deficiency in bales is about 22,700. By the table we subjoin, it will be seen, however, that whilst the deficiency in bales, as mentioned above, is only 22,700, if we take the weights of the increased and decreased receipts—averaging the latter at 450 lbs. to the bale, and deducting the receipts of Texas, the deficiency in this year's crop is actually 91,300 bales, as compared with last year."

STATE TOBACCO INSPECTIONS.—A correspondent of the *Annapolis Republican*, gives the following interesting statistics with regard to the State Tobacco inspections. The communication says:

As the profit to the Maryland planter on the cultivation of tobacco is reduced to the lowest ebb, and there is at this time an unusual interest excited in regard to the cause—therefore, I have compiled for the information of the planter, from the official report of the State Tobacco Inspectors, the following table, showing the number of hogsheads inspected annually, with the name of the State, and quantity received from each State, annually, from 1840 to 1846, inclusive:

States.	1840	1841	1842	1843	1844	1845	1846
Maryland	31,222	22,330	31,652	29,848	32,095	30,684,41	327
Ohio	8,483	7,867	11,519	13,194	15,423	26,716,22	862
Kentucky	407	1,033	1,023	2,803	1,074	1,335	468
Missouri			85	2,179	79	499	167
Virginia	539	334	271	167	206	100	45
N. Carol'a		10	2	1			15
Indiana			16				
Tennessee					21		
Penna.	11	23	8	32	17	19	46
Total.	40,655,38	39,597,46	57,578,48	924	18,915,59	353,70,682	

BED-BUGS.—The common bean-leaf is said to form a good trap for catching these troublesome vermin. The leaves are placed, bottom upwards, in suitable places, and the bugs get their legs tangled in attempting to crawl over them. Try it.

LEAVES are to plants and trees, what the lungs are to animals.

Courage is to the other qualities of the soul what the spring is to the other pieces of a watch.

From *Blackwood's (Eng.) Magazine*.

HONOR TO THE PLOW.

Though clouds o'er cast our native sky,
And seem to dim the sun,
We will not down in languor lie,
Or deem the day is done:
The rural arts we loved before,
No less we'll cherish now;
And crown the banquet, as of yore,
With Honor to the Plow.

In these fair fields, whose peaceful spoil
To faith and hope are given,
We'll seek the prize with honest toil,
And leave the rest to Heaven.
We'll gird us to our work like men
Who owe a holy vow,
And if in joy we meet again,
Give Honor to the Plow.

Let Art, array'd in magic power,
With labor hand in hand,
Go forth, and now in peril's hour
Sustain a sinking land.
Let never Sloth unnerve the arm,
Or Fear the Spirit cow;
These words alone shall work a charm—
All Honor to the Plow.

The heath redress, the meadow drain,
The latent swamp explore,
And o'er the long expecting plain
Diffuse the quickening store:
Then fearless, urge the furrow deep
Up to the mountain's brow,
And when the rich results you reap,
Give Honor to the Plow.

So still shall health by pastures green
And nodding harvest roam,
And still behind her rustic screen
Shall Virtue find a home:
And while their bower the muses build
Beneath the neighboring bough,
Shall many a grateful verse be filled
With honor to the Plow.

COOKING SALT BEEF.—Those who have voyaged much on the great waters must have observed what care a good ship's cook takes to soak his beef well, so as to wash the salt to it. With this view he causes it to be towed through the pure water of the sea a day or two before it is cooked. Sometimes he makes it fast to a rope and pitches it over the stern; but here John Stark sometimes makes free with it; and thus establish another claim to that hatred which all seamen cherish for this voracious inhabitant of the ocean. Generally, therefore, two or three lumps of beef and pork may be seen dangling from the bow, dipping as the vessel plunges, sinks, and rises in the clear blue waters of the sea; buffeted, knocked about, now deeply immersed and now dripping high above the waves, the meat is well washed through every fibre before it is plunged into the pot.

The sea cook always boils or rather simmers his meat very slowly, so that it has time to swell and become tender. This is the great secret of boiling meat that has been salted for long voyages.—It is an improvement to partially boil it in one water; to pour such water away, and afterward add fresh water, if hot so much the better.—*Liverpool Albion.*

MORTICULTURAL.

WORK IN THE GARDEN.

As the season has arrived when every lover of horticulture should put forth his every energy to place his *garden* in order, and thus secure to his family supplies of those vegetables which are so necessary to human health, which contribute so largely to the comforts and luxuries of the table, and which add so much to the hospitalities of one's home, we will endeavor to point out, in a cursory way, a few of the many things which should claim present attention. And in so doing, we feel assured that our labor will not prove to have been exerted in vain, as we shall be sustained by the matron of each homestead, and no female bosom ever yet was appealed to in a just and virtuous cause, without that cause found such a response as guaranteed success. Men are often prompted by the allurements of selfish ambition to achieve deeds worthy of their kind; but woman, ever prone to the performance of good acts, needs no other incitement than those which abound in her guileless heart, to impel her onward, wherever the opportunity presents itself of doing good. Thus encouraged, we shall proceed in the discharge of our duty under the confident hope that before April shall have been placed among the things that have passed, every garden owned by each of our readers will have been put in a condition to make its owner esteem it as the gem of his estate. With these hopes we enter into details and leave it to time to write the history of events.

Setting out Cabbage Plants.—Taking it for granted that you have a fine bed of cabbage-plants ready to set out, we would say to you, to prepare a suitable bed for their reception—first, by covering it with a plentiful supply of rich stable manure, and carefully having the bed spaded up and thoroughly pulverized by raking. Then prepare a paste-like mixture of soil and *flour of sulphur*, brought to the proper consistency with water. Then draw a line across your bed, north and south, three feet apart, and insert a plant at every 3 feet's distance, first dipping the roots and stem of the plant into the mixture as far up as the leaves. This mixture will serve the double purpose of manure and a repellent of the cut-worm, so destructive to plants at this season of the year. Press the earth well around the roots and stem of the plants with dibble and finger and thumb.

If, however, you have been so remiss as not to have provided yourself with plants, proceed at once and sow a bed on your border, both with early and late cabbage seed, in order that you may have a prolonged supply.

Pars.—Plant a small bed of peas to succeed those which you planted last month. A very few rows will answer the demands of your table.

Bush Beans.—Prepare a part of these now, and in two weeks plant the remainder of it, so that by the time you may have used the product of the first planted, the second half may come into play.

Lima Beans.—Towards the middle of this month plant, in hills, a bed of these excellent beans, and provide yourself with poles for them to run on, in

order that when ready you may drive them down for the beans to climb on.

Celery.—Prepare a bed 4 feet wide, by manuring, spading and raking—mark it off in drills a foot apart and half an inch deep; drop your celery seed thereon, cover and compress the earth around the seed. A bed 12 feet long, of the width named, will yield you plants enough to set out a very large bed of this healthful and delicious vegetable.

Carrots—Parsnips—Beets.—A few rows of each of these fine table roots may now be drilled in for early table use. It will be time enough next month to put in the winter crop. In the cultivation of such roots long manure should not be used. That which is thoroughly rotted is best.

Horse Radish.—Select a moist shady bed of deep loamy soil and set it out with this most excellent continental root.

Rhubarb.—Every garden should have a few dozen plants of this excellent vegetable in it. Besides its virtues as a material for pies it possesses eminently curative properties in that distressing disease, the summer complaint of children. When used for the latter purpose, a syrup should be made of it with loaf sugar—a teaspoonful of which should be given three times a day.

Raspberries.—If not already done, these should be pruned of their old wood, tied up, have the weeds and grass cleared away, and some well rotted manure or thoroughly decomposed compost dug in around the roots.

Gooseberries and Currants.—Thin these out of all the old wood and straggling branches, and dig in some well rotted manure.

Strawberry and Asparagus Beds.—With regard to these, if you have not already done so, follow our instructions as given last month. And if it so happens that you have neither in your garden, proceed at once and get the plants and set out a bed of each.

Early Potatoes.—If not done already, plant a bed of these agreeably to the directions given under the head of work “on the Farm.”

Lettuce, Radishes, and Garden Salads of all kinds.—Seeds of these should be sown now, and at intervals of two weeks for months to come so as to ensure a succession of these vegetables.

Tomatoes.—It is full time that you had prepared a bed to set out your tomato plants. As this is a gross feeding vegetable, you must manure the bed in which you may transplant them heavily. If you have provided yourself with plants, and cannot procure them from some garden, there is still time to sow the seed—your Tomatoes, however will come late.

Herbs—Medicinal and Culinary, should now be sown, and transplanted as speedily as possible.

Flowering Shrubs and Vines of all kinds, should be trimmed and transplanted as early as possible this month.

Flower Seeds of every variety should be forthwith sown.

Flower Bulbs.—Set these out as speedily as possible, taking care to manure them moderately with manure that has undergone the process of decomposition.

Dahlias.—The bulbs of this beautiful Mexican production may be set out any time after the middle of this month. As it is a plant of rapid growth and a gross feeder withal, the soil in which it is placed should be liberally manured with good strong manure. In placing them in the hole, be careful not to cover the

top of the root more than 2 inches below the surface. After the plant comes up, in times of drought the watering pot must be freely used—occasionally watering them with soap suds imparts strength and vigor to the plant, as well as size to the bloom.

Ornamental Trees.—If you have no ornamental trees around your house, procure some and plant them out forthwith—A mansion in the country without trees, is, indeed, the impersonation of desolation—and while you may thus be supplying your home with trees, go a little farther and provide it with flowering shrubs, those unerring emblems of refined minds and kindly hearts.

White-washing.—See that all your out-buildings receive the benefit of this wholesome way of cleansing them.

Confiding the supervision of your Garden to the care of your better half, under the firm belief that its appointments will be fulfilled to the letter and in the spirit, we say God speed you in the good work committed to your and her care.

From the Horticulturist.

QUINCE STOCKS FOR PEARS.

BY S. G. PERKINS, ESQ., BOSTON.

There is a strong prejudice in this country against Quince seedlings as stocks on which Pears should be grafted; but I think if the question is properly considered, it may be removed. First, it is said that they are shortlived, and that they die of diseases to which the free or pear stocks are not liable. That they are shorter lived than pear stocks, there is no doubt; but when we consider that they are brought into bearing in a year or two after they are grafted, and when quite small, while the pear stocks require many years to bring them to the same advanced and fruitful state, we think, it is undeniably a compensation.

It is also true that a pear stock may produce ten times as much fruit, when fullgrown as a quince stock, but the advantages are perhaps fully balanced in other ways, as follows: Pear stocks must be planted at least thirty feet apart, and even at this distance, when grown to any size, they will shade so much of your ground, as to interfere seriously with its cultivation; the roots also extend in proportion to the head, and exhaust of course, so much soil as they cover. Now quince stocks may be planted within ten feet of each other, and have room enough for their heads; while their roots, being all fibrous, are circumscribed in their growth, requiring very small space, and exhausting none of the soil under cultivation, and their heads shade no ground in consequence of being limited by pruning, to six feet in diameter, and not being allowed to extend upward more than eight or ten feet.

On an area sixty feet square, you may plant four pear stocks; these will shade with their branches, and exhaust with their roots, at least one-half of this square. On such a lot, you may place around its borders twenty quince stocks, which will neither shade the ground, nor exhaust its soil. These stocks will produce you fine melting fruit with certainty, if taken care of, while all the care of the gardener and proprietor united, will not prevent some kinds of pears from canker, cracks, and blight, if produced on pear stocks.

"But," say the advocates for pear stocks, "the quince is subject to be destroyed by the borer!"

This is true, and so is every thing subject to be

destroyed in one way or another, if it is not taken care of, by those whose duty it is to look after them.

I have nearly or quite a thousand pears on quince stocks in my garden, and I doubt if any cultivating an equal number of pear stocks of the same size, has for the last twenty-five years, lost as few trees as I have.

With respect to the borers, if care be taken to examine the trees twice a year, without fail, say in the middle of June, and the middle of October, there will be few or no borers in the garden. There is little or no trouble or labor in this, if it be done regularly. My gardener will destroy all borers that he finds in six or seven hundred and thirty-four trees, which he had examined in that time. This, therefore, is no herculean trouble or labor.

These quince stock pear trees may be fruited on all sides by judicious pruning, from the top to the bottom, within a foot of the ground; and as the melting or soft fleshed pears, which are called *Bourres*, are much better on these than they are on the pear stocks, you may have more good fruit on your quince, than you can get on your pear stocks.

If you want trees to plant in grass ground, I should recommend pear stocks by all means; but in gardens I should choose to have the bulk of my fruit on quince stocks.

If you undertake to raise pears on seedlings, or layers of one or two years old, you will find how much sooner they get their fruit on quinces. Quince layers are very easily obtained by any one having quince trees in their grounds. The *Portugal Quince*, is the best to strike from, as they grow more freely and larger than the common sort, and will increase with the growth of the pear scion that is put into it; but this, the common sort will not do. But it is much cheaper, and more sure, to import from France, both your seedling pears and quince layers, if you wish to cultivate a nursery.

I have now in my garden, many pear trees on quince bottoms, growing both as standards and as espaliers, which were planted upwards of twenty years ago. They are both in perfect health, and full-bearing every summer. The only objection to the standard pear stock is, that if left to itself, its head grows too large for its roots to support it steadily in the ground, but this objection does not apply to the espaliers. It is therefore best to keep their heads pruned within limited dimensions, if you raise them as standards, but quince bottoms are far preferable for espaliers to pear stocks.

Pears on quince stocks will live to a good age, if taken care of, and no exciting manure be allowed to come to their roots. If they become weakly, apply fresh virgin soil to the roots in the room of manure.

SAM'L. G. PERKINS.

Brookline, near Boston.

REMARKS—Our esteemed correspondent has undoubtedly had more experience in the cultivation of pears on the quince stock, than any other person in the country, as it is nearly forty years since his first planting of this kind commenced. His very great success, and long practice, entitle his remarks on this subject, to careful attention. The *Portugal Quince*, especially commended by Mr. PERKINS for this purpose, has been very little known or used hitherto, in the United States. From its greater vigor, it is undoubtedly far better adapted for a stock for the pear, than the common quince.—ED.

From the Same.

NOTES ON TWENTY OF THE FINEST PEARS.

BY CHEEVER NEWHALL, ESQ., DORCHESTER, MASS.

SIR—In the December number of the Horticulturist, you have given the answer of several gentlemen of great experience, to the question, "which do you consider the three best pears." As was to be expected, a variety of opinions were elicited. I have long been desirous that some one better qualified than myself, would give to the public the result of his experience in the cultivation of this delicious fruit, and state which are really the best varieties. I think it may be gratifying to those unacquainted with the cultivation of fruit, to know that there are at least twenty varieties of pears, already well tested in this vicinity, of great merit, and well worthy of extensive cultivation.

As no one has come forward to furnish such a list, I conceive this may be a proper time to ask permission to occupy a small space in your useful journal, for the purpose of adding to the catalogue of nine sorts, (see "Pomological Gossip," in the December number,) the varieties which I consider the best and most profitable to cultivate in the New England States. I am well persuaded that I can furnish no catalogue to which *all* will assent, but my object will be attained, if the "uninitiated" derive any information by my remarks.

In the first place, I agree that all the varieties named by the distinguished cultivators referred to in the "Pomological Gossip," should be labelled "first quality," except the *Bloodgood*. This pear may be good in some soils, but I have never succeeded in ripening one that could be classed first quality. In the next place, I shall add to their catalogue, three of our native varieties which originated in, and near this city, viz: the *Dix*, *Heathcot*, and *Andrews*, with three foreign varieties, the *Urbaniste*, *Paradise d'Automne* and *Passé Colmar*; and for strong rich soils, the *Flemish Beauty*, *Buerre Diel* and *Gloot Moreeau*. These are, in my estimation, all of first quality, but not of equal merit. The *Dix* pear, sometimes, in this neighborhood, cracks in exhausted soils, but is a noble and delicious fruit, not surpassed, in my estimation, by any other pear known. The *Urbaniste* is more sure of producing a crop of *well ripened* fruit, than any other variety I cultivate, except the *Bartlett* and *Vicar of Winkfield*. The *Passé Colmar* seldom attains perfection, unless the fruit spurs are severely pruned out in the spring, or the fruit thinned when quite small. There are several other varieties, more recently introduced, but I have not yet thoroughly tested them.

As to the winter pears, for cooking, I esteem the *Cataliae* as the best. It is very large, stews very tender, and is then of rich colour, and superior flavor. The *Black Pear* of Worcester, or as it is called here, *Iron pear* is the most profitable. The trees bear heavy crops of fair fruit, of large size. When cooked, it is of a sprightly agreeable flavor, but a little astringent. Both of these kinds are in use from December to May, and both require a rich clayey soil to insure their greatest perfection. One of my neighbors, who cultivates the latter pear largely, has realized for several years past, ten dollars a barrel, for his whole crop, by shipping them abroad.

For early fruit the *Madeleine*, (or *Citron des Carmes*.) ripening in my garden the last of July, and the *Jargoneille*, about ten days after, are the two best

*This is uniformly the very best early Pear here.—ED.

pears of the season, but cannot be classed as first quality. I have said nothing of the *White Doyenne*, or *St. Michael*, as I presume its merits and demerits are known to most of your readers. With me it succeeds well, when grafted on quince stocks, but is worthless on pear stocks. The *Madeleine* is the reverse of this; it succeeds on its own roots, but on quince roots it cracks; is very astringent and worthless.

The *Easter Beurre*, is a pear of first quality, when well ripened, and will keep, with care, until May, but is, with me, a shy bearer, and often does not come to maturity.

In conclusion, permit me to state, that in my judgment, it would be greatly for the interest of cultivators of the pear, to give more attention to our four native varieties, the *Seckel*, *Dix*, *Heathcot* and *Andrews*.

The *Cushing*, a native, is a good fruit, but ripens with the *Bartlett*, and is inferior to it.

CHEEVER NEWHALL.

Dorchester, Jan. 1847.

REMARKS—The foregoing article will be very acceptable to those of our readers, who are in the "deep despair" of endless catalogues, and know not where to choose, amidst the infinity of names. After the expression of opinions, like those contained in this communication, from various sources of the highest character, in different parts of the country, we shall arrive at a correct estimate of the absolute value of the great number of fruits under high sounding names, that have been imported in the last fifteen years. Mr. NEWHALL is one of the Vice Presidents of the Massachusetts Horticultural Society, and a most intelligent and zealous cultivator, and his remarks are considered valuable on pomological subjects.—ED.

SOME FACTS ABOUT THE CURCULIO.

BY J. W. BISSELL, OF ROCHESTER.

The curculio having last year destroyed our (Bissell & Hooker's) plums, cherries and nectarines, I determined this season to save at least a portion, and succeeded so well that our plum trees were overloaded and needed to be relieved of part of their burden; upon most of our cherry trees the fruit was good, though we lost all our nectarines except two. For this latter fruit, these insects have a great partiality, and I found them on trees long after they had disappeared from all others. I never found more than two and seldom more than one egg in any other fruit than a nectarine; in a single one of those I have sometimes observed a dozen, and have seen three curculos laying eggs at one time in a single specimen.

By making each day last spring a careful examination, I ascertained that the curculos commenced their depredations upon plums first, and on the first day of their appearance, (May 20,) I killed twenty. For the space of nearly a month from that time, the trees were thoroughly shaken almost every day, and occasionally until the 15th of June, though in the latter part of the time very few were caught. During the first month, the number killed from 50 trees sometimes amounted to 600 each day; in July hardly a dozen. The manner of taking them was effectual, though somewhat laborious: a large white cloth was spread under the tree, reaching as far as the foliage extended: the body and the larger branches were then repeatedly jarred with a pole about ten feet long, the end of which was covered with thick cloth, and

an old india rubber shoe to prevent injury to the bark, and the insects as they fell were killed with the fingers. Shaking the tree or the branches violently with the hand, stopped the operations of the curculio for a short time, but they would not quit their hold; to make them do that, required the sudden jar, such as was given by the pole.

Some trees I syringed with strong tobacco water and whale-oil soap suds several times, wetting every part, even of the leaves, with these compounds, so that the odor thereof was perceptible at a distance of twenty feet, without producing any effect, for the curculio seemed to be as numerous on these trees after washing as before. I have seen one lay an egg in a plum, the skin of which was so coated with these washes as to be exceedingly nauseous to the taste. I am satisfied that a war of extermination, not of prevention, will be our only hope. These sickening smells incommoded only ourselves. I thought that the tobacco water or soap suds might perhaps kill the eggs already laid, or prevent the young worm from eating into the fruit; but I could see no such result, and found that the worm would live after having been immersed in tobacco water so strong as to be as dark as port wine.

About two days after the egg is laid, the skin above it becomes brown, and the egg may be easily extracted with the finger nail or the point of a knife. I operated in that manner upon the plums on one branch of a tree, and saved all of them without apparent injury to any.

Fruit ordinarily falls about a fortnight after it is stung, and the grub soon afterwards makes his way into the ground, but if the egg is laid after the stone has become hard, the fruit does not often drop, and the tenant retains possession, causing the decay of the side where he is at work. In all cases the fallen fruit should be destroyed as soon as possible. When Morello cherries are stung after the stone has hardened, the skin and pulp on that side dry and crush the worm. I examined a great number, and found that not one had escaped. This is not the case with other cherries, as abundant experience while eating them has proved. Generally these insects appear to know when the stones become hard, and the fruit unfit receptacles for their eggs; they then desert such trees and seek others, attacking the peach last. The young peach having a peculiarly woolly covering, the curculio often lays her eggs in the stem, and the grub finds its way through that into the fruit.

The beetle when it falls upon the sheet beneath the tree rarely attempts to fly, preferring to use the legs rather than the wings, yet it navigates in search of fruit, and often makes its appearance upon fruit trees distant from others, and stings all the fruit the first year any is produced. An observing horticulturist, near this city, who is indefatigable in his war upon all insects, and whose fruit yard is nearly a mile distant from any other, informs me that he finds the curculio more numerous in his grounds, and especially upon the westerly trees, immediately after a west wind. Across the river opposite to him, and extending west for many miles, is a road well settled, abounding with fruit, and especially with plum trees. From that source must come these insects, assisted in the flight by the prevailing winds. That they do not fly very high above the ground is proved by building tight board fences ten or fifteen feet high around single trees or fruit yards; those trees within will not be visited, while those without will sometimes be entirely stripped. I have heard this summer of several persons who had tried this plan with

entire success; yet there is no doubt that the cheapest and most effectual way is to shake them off, a troublesome operation, but one that pays well in the end.—*Horticulturist.*

NEW WORK ON FRUIT.

We have received a copy of a prospectus of a new work, to be published in Boston, by C. M. Hovey, Editor of the Magazine of Horticulture, entitled:

"The Fruits of America, by C. M. Hovey, containing richly colored engravings, accompanied with the wood and foliage of all the choicest fruits cultivated in the United States. From paintings from nature, made expressly for this work, by W. Sharp, chromolithed and retouched under his direction. The Letter Press to contain a full description of the fruits, the habit of growth of the trees, color of the wood, and form of the leaves; the synonyms under which each variety is known, the origin, and period of introduction, and all other particulars of importance to the pomologist."

The increased attention which, within a few years, has been given to POMOLOGY, and the desire to obtain the most correct information in regard to the choicest varieties of FRUIT, seem to demand a Work of the character now announced. The recent publications devoted to the subject, as well as the many valuable articles in the Horticultural periodicals of the day, in reference to it,—illustrated as they have been with outline E. gravings of Fruits,—have done much to spread a better knowledge of the many varieties which have been brought to notice,—to facilitate the detection of Synonyms,—and to establish a more correct Nomenclature.

But experience has shown, that, to arrive at safe and certain conclusions, a reliance cannot be placed upon outline Engravings, or Descriptions of the fruit alone; and the great errors, which have been the cause of so much disappointment to the ardent Pomologist, might have, in most instances, been prevented, had cultivators made themselves acquainted with the Habit of the Trees,—the Color of the Wood, or the Form of the Leaves. They are, indeed, in some instances, more to be relied upon than single specimens of the fruit alone: and an experienced cultivator can at once detect, at any season of the year, a great portion of the well known varieties of fruit. These characteristics have been considered, with many, as of secondary importance; but since the rapid multiplication of new sorts, we believe they will be found quite essential to aid in the detection of Synonyms, and the distinction of varieties. But while engravings merely, have their value, they do not convey to the Pomologist that general knowledge of fruits which he often wishes to acquire; such as the color or relative beauty of the different varieties; some of the most choice being of very inferior appearance, while others, less excellent, possess a beauty which often renders them worthy a place in every good collection.

The Introduction of new Fruits is a subject full of exciting interest to every Pomologist; and the earliest information is eagerly sought in regard to the many varieties which are yearly introduced from abroad, or produced at home. To the Horticultural works of the day, the cultivator will refer for brief accounts of these; but it will be the object of this Work to give correct Drawings, and full Descriptions of the SELECT FEW, especially those of American origin, as soon as they have been proved to possess qualities which entitle them to general cultivation.

To supply to the FRUIT CULTIVATOR this desideratum, will be the object of this Work. It will contain richly Colored Illustrations of Fruits, accompanied with the Wood and Leaves, from Paintings made expressly for it, under the direction of the Author; and, with the text, an outline engraving of every variety, accompanied, when important, with sketches of the Habit of the trees; leaving nothing which can, in any way, assist the Amateur cultivator, or Nurseryman, in the identification of the numerous varieties, or furnish him with the fullest information in regard to their merits.

The work will appear in Royal Octavo Numbers, (uniform with Audubon's *Birds of America*,) and will contain four plates each, with Eight Pages of letter-press, on the finest paper, and in beautiful type; the Original Paintings executed by that distinguished artist, W. SHARP, chromo-lithed and retouched under his eye. The text will give all the Synonyms under which each variety is known, its origin, when to be ascertained, its period of introduction, with an accurate description of the Habit of the Tree, Wood, Leaves, Flowers, and Fruit, the Period of Ripening, and all other particulars worthy of note. The whole, with a few exceptions in the early numbers, from Specimen Trees in the extensive collection of the Author, where their comparative merits, in the same soil and locality, can be correctly estimated.

The Plates will not be numbered or paged, but left with a blank No., so that each Class of Fruit may be bound up by itself, arranged alphabetically, according to the season of ripening, or in any other way, when the Work is completed, or together as issued, at the option of Subscribers. Twelve Numbers will complete a Volume, which will be furnished with a Title-Page and Index. A list of Subscribers will accompany each Volume.

The First Number will be issued on the First of April, 1847, and the succeeding numbers every alternate month.

Number 1 will contain the following varieties of fruits:—Beurre' d'Arenberg Pear, Glout Morceau Pear, Van Mons Le'on le Clerc Pear, Baldwin Apple.

Terms of Subscription.—In Royal Octavo, richly colored, at \$1 per number, payable on delivery. A limited number of impressions in Imperial Quarto, very highly finished, \$2 per number.

Subscriptions received at the bookstore attached to the "American Farmer."

THE MONTHLY ALPINE STRAWBERRY.—The monthly alpine, or bush alpine, as it is sometimes called, is perhaps the finest flavored of all the numerous varieties of strawberries which are at present cultivated in this country. Without exception it is by far the most prolific, being a constant bearer from the latter part of May until November, in the open air, or the whole year when under glass. It is propagated from the root, and, being without runners, forms a neat inner or outer border for the garden; occupying but little space, and growing very compactly and evenly.

WM. B. ODDIE.

EFFECTVELT, ROCKLAND CO., November 21, 1846.
American Agriculturist.

Have any wounded you with injuries, meet them with patience; hasty words rankle the wound, language dresses it, forgiveness cures it, and oblivion takes away the scar.

One seldom finds that for which he seeks, when he searches with impatience.

LADIES' DEPARTMENT.

HOW TO SPEAK TO CHILDREN.—It is usual to attempt the management of children either by corporeal punishment, or by rewards addressed to the senses, and by words alone. There is one other means of government, the power and importance of which are seldom regarded—I refer to the human voice. A blow may be inflicted on a child, accompanied with words so uttered, as to counteract entirely its intended effect; or the parent may use language, in the correction of the child, not objectionable in itself, yet spoken in a tone which more than defeats its influence. Let any one endeavor to recall the image of a fond mother long since at rest in heaven. Her sweet smile and ever clear countenance are brought vividly to recollection; so also is her voice; and blessed is that parent who is endowed with a pleasing utterance.—What is it which lulls the infant to repose? It is not an array of mere words. There is no charm, to the untaught one, in letters, syllables, and sentences. It is the sound which strikes its little ear that soothes and composes it to sleep. A few notes, however unskillfully arranged, if uttered in a soft tone, are found to possess a magic influence. Is this confined to the cradle? No; it is diffused over every age, and ceases not while the child remains under the parental roof. Is the boy growing rude in manner, and boisterous in speech? I know of no instrument so sure to control these tendencies as the gentle tones of a mother. She who speaks to her son harshly, does but give his conduct the sanction of her own example.—She pours oil on the already raging flame. In the pressure of duty, we are liable to utter ourselves hastily to children. Perhaps a threat is expressed in a loud and irritating tone; instead of allaying the passions of the child, it serves directly to increase them. Every fretful expression awakens in him the same spirit which produced it. So does a pleasant voice call up agreeable feelings. Whatever disposition, therefore, we would encourage in a child, the same we should manifest in the tone in which we address it.

HOW TO CLEANSE FURNITURE.—Oil, rubbed over varnish when discolored by water, will restore the color and polish. I must remember to tell this to Betsey as she scolds terribly at the hot water spoiling the varnished bedsteads; if the oil don't succeed, a little varnish will, but the hot water must be used. Betsey and I have had a long talk about the best method of cleaning furniture, and the following recipes are decided on as the best. Varnished furniture should be nicely washed with warm soap-suds on a very soft cloth, and wiped perfectly dry with a fine soft towel, and then polished with a little sweet oil, rubbed on and carefully wiped off again with a silk handkerchief. Mahogany furniture must be kept perfectly clean, or it bespeaks bad house-keeping, should it become mouldy or otherwise soiled, wash it clean with warm soap and water, then polish by rubbing on a paste made of equal parts of beeswax, soft soap, and spirits of turpentine melted together; when this is well rubbed in, spread on a thin coat of hard beeswax; let this be thoroughly rubbed in with a hard brush, with a silk handkerchief.—*American Agriculturist.*

TO WASH CHINA CRAPE, SCARFS, &c.—If the fabric be good, these articles of dress can be washed as frequently as may be required, and no diminution of

their beauty will be discoverable, even when the various shades of green have been employed among other colours in the patterns. The method of cleaning them is as follows:—make a strong lather of boiling water—suffer it to cool; when cold or nearly so, wash the scarf quickly and thoroughly, dip it immediately into cold hard water in which a little salt has been thrown (to preserve the colours) rince, squeeze, and hang it out to dry in the open air; pin it at its extreme edge to the line, so that it may not in any part, be folded together; the more rapidly it dries the better.

To Boil Salt Meat Tender.—Put the meat over a fire in cold water, and never suffer it to boil faster than a gentle simmer or it will be hard and tough. When done beef will separate easily from the bones—ham and tongue from the skin. A large shovelful of wood ashes may be put into the water in which ham or smoked tongue is to be boiled, and some hay at the bottom of the pot. Allow a quarter of an hour for every pound of ham. For corned ribs of plate piece of beef, when well boiled take the bones out carefully, and put it into good shape by wrapping about it neatly, all the fat and loose arranging pieces; then put it between two pieces of thick planks, kept for the purpose, and press it until perfectly cold, with a weight, say fifty-six. It makes large smooth slices, when cut, and at breakfast or lunch it is positively delicious.—*Agriculturist.*

OKRA SEEDS A SUBSTITUTE FOR COFFEE.—Last spring we found in the papers and published a letter signed J. F. Callan addressed to H. L. Ellsworth, declaring that the seeds of garden okra, when roasted and used as coffee, cannot be distinguished therefrom.

We raised a quantity of the article last season and tried the experiment. Though it makes pretty good coffee, we could distinguish it from the best Java. Yet it is certainly the best substitute for this foreign luxury we have ever tried, and is easily raised by any one.

But the greatest value attaches to okra on account of the superior soup made of its green pods. After having tasted okra soup, we care for no other; it is just the thing.—*Bloomington (Ia.) Herald.*

BREAD STUFFS IN EUROPE.—The news by the steamer Hibernia, which has arrived at Boston, bringing Liverpool dates to the 4th of March, confirms our formerly expressed opinion, that the great demand which has sprung up in Europe for our bread-stuffs, is likely to continue. The distress, occasioned by the loss of the Potato, and the shortness of the grain crop, is not confined to Great Britain, but the most alarming accounts are received from France, and the Continent, of the scarcity of food, and large orders are said to have been sent out by the Hibernia for the purchase of breadstuffs for France. Vast supplies are ordered from every quarter. Complaints are made in the papers that so much less grain comes from the U. States to French than to English ports. It is said that the French are about to take military possession of Majorca, Minorca and Ivica. Very large shipments of grain for England and France have been made at Constantinople. The French Chamber has voted to increase the army by adding 210,000

troops. This is always the plan of the French government when trouble threatens at home, to divert the attention of the people to objects afar off.

IRELAND.—*The Famine.*—The provincial journals contain most painful accounts of the ravages of famine and fever in Kings County, Tipperary, Cork, Kerry, Mayo, Sligo, Waterford, and other countries. —The unfortunate peasantry are dying by hundreds. —The most eager applications are made in various quarters for coffins to inter the victims of famine. The fever hospitals are crowded, and deaths are increasing.

Harvest Prospects.—The Limerick Chronicle of Wednesday says:—"The young wheat crops look remarkably well in all parts of the county. The farmers are sowing potatoes more generally."

In the House of Commons, on the 2d instant, Lord John Russel announced that her Majesty had been pleased to call a Council to consider the best day on which to appoint a general fast and humiliation, on account of the present awful condition of the sister kingdom. This announcement was received with evident satisfaction by both sides of the house.

O'Connell is rapidly sinking. His physicians have announced that he is too weak to write letters, and his son stated this at one of the repeal meetings.

The Irish poor are emigrating in great numbers, chiefly to the U. S. All the ready ports are crowded, but the *Chronicle* says, "unfortunately they are those whose loss will be severely felt as they possess pecuniary means and are not destitute." Freight for steerage passengers has risen to 4 guineas. Landlords are aiding their peasantry to emigrate.

In France the scarcity of food is on the increase, and prices are advancing. The most alarming accounts have come in from Lower Normandy, and a general scarcity is apprehended along the coast.

Bread Stuffs.—After the sailing of Cambria, the price of breadstuffs gave way, and a reduction of 7s. to 8s. per bbl. in flour took place. Towards the close of February, renewed confidence was observable, and buyers again came forward, and an upward movement was the consequence. The effect of the news upon our market has been to give a firmness to breadstuffs, and a slight increase in prices.

Cotton.—There had been some revival in the trade, with a considerable inquiry from exporters and on speculation, and the prices generally had been slightly in favor of holders. The market, however, closes quietly, and no change made in the quotations.

The New York Express of Monday says—

The news by the steamer Hibernia has agreeably disappointed all classes, and is better than was anticipated. The prevailing belief was that the accounts would show a fall in the Flour and Grain market—a falling in Cotton—a large drain of Specie from the Bank of England—a scarcity in the money market, and a rise of interest, instead of which we find that the demand for American Breadstuffs is unabated, and the prospect that, notwithstanding all that has been sent, there will be an increased quantity require-

ed. Cotton had yielded a little, but the fall there will have no influence on prices here. Operators on this side of the Atlantic know that the crop is to fall much below the estimates that were made two months ago; consequently, with a decline on the other side, prices have, for the last two weeks, gone up here.

The money market is decidedly better than was apprehended. All parts of the world, except America, were in debt to England; and, therefore, the drain of specie for the United States has been fully made up by other countries. The Bank of England has lost but a comparatively small amount of specie, and the circulation of the country was about the same. There had been no rise in the rate of interest; and the money market could not be so very tight when the Government were enabled to make loan of eight millions of pounds, or about forty millions of dollars, at about 90 cents on a dollar, for a three per cent. stock—being equal to par for a three and a half per cent stock.

This news establishes the fact that the demand for breadstuffs, from this country, will continue as great as ever. This is a most important point, particularly at this season, when our rivers and canals are becoming navigable, and when the receipts of produce must be uncommonly large.

The receipt of specie, by this steamer, will tend materially to relieve the money market here.

Liverpool, March 2.—Tobacco—The sales this month are 1411 hogsheads, viz : 179 do Virginia Leaf, 373 stemmed, 157 Kentucky leaf, and 662 stemmed; of these 46 Virginia leaf, 118 stemmed, and 20 Kentucky leaf were taken for Ireland; 10 Virginia Leaf, 196 stemmed and 30 Kentucky stemmed, for Scotland; 114 Virginia and 168 Kentucky leaf, for exportation, and 9 Virginia leaf, 58 stemmed, 13 Kentucky leaf and 632 stemmed, by the trade.

Havre, Feb. 28.—Rice—Notwithstanding the continued rise in Breadstuff, prices of Carolina, have undergone no alteration, our extreme quotations being f37 to 41. The sales, however, have been to a fair amount at f37 to 40 per 50 kil. duty paid. The imports were 4200 tierces from Charleston and New York, 7303 bags East India, and 1727 casks Rice Flour from New York. Stock on hand 1500 tierces.

Hamburg Market, March 1.—Tobacco—North American sorts continue much in the same languid position they held all the year round. The nominal value is 1 to 1½ sch for crossed Kentucky, 1½ to 2½ sch for second, and 2½ to 3 sch for first; cigar leaves sold as high as 6 sch per lb. Maryland and Ohio we quote 1½ to 1 5 sch for ordinary to good ordinary, fine leafy yellow 6½ to 7 sch per lb. Havane has latterly experienced a rise.

Rice—Our uncommonly low stock of Carolina, 650 tierces, bids fair to keep up the actual price of from 15½ to 18 marks, according to quality, although sales remain slow from the dearness of the article.

USEFUL FACTS.—The weight of the English bushel of Wheat is estimated at 70 lbs., 8 bushels therefore weigh 560 lbs., making their QUARTER, or one-fourth of a ton. Nine and one-third (9½) bushels of American Wheat, estimated at 60 lbs. per bushel, is equivalent to the English quarter— $\frac{1}{4}$ of a ton, or 560 lbs. An English sack of meal weighs 280 lbs., 7 sacks 1960 lbs., which is equivalent to 10 American bushels. A bushel of fine Liverpool Salt weighs 55 lbs. the sack contains 4 bushels, or 224 lbs., 10 of which make a ton, or 2240 lbs. A bushel of ground Alum Salt weighs 64 lbs., the sack contains 3½ bushels, making 224 lbs. ten of which make a ton, or 2240 lbs.

FLORICULTURAL.

FLOWERS—Work for April.

Prepared for the American Farmer, by S. Feast, Florist.

Greenhouse Plants—Repot all such as require it, and give an abundance of air at all times, unless the weather is cold. Attend to watering whenever the soil appears dry. Syringe or water them over the tops frequently.

Camellias will now be advancing in growth rapidly, and should receive plenty of water; if any require repotting, it should be done at once.

Geraniums will now be blooming, and should receive plenty of air and water.

Azaleas and Rhododendrons will now be in full bloom and should have an abundance of water.

Cactuses should have an additional supply of water.

Hardy Annual Flower Seeds may now be sown in the open ground—Tender Annuals in pots or boxes.

Lagerstroemias, Oleanders, and other hardy plants, which have been kept in the cellar all winter, may be exposed to the open air about the middle of the month, choosing a damp day for the purpose.

Gladiolus, Jacobean Lily, Tigerflower and Tuberose Roots, may be planted towards the end of the month.

Roses, Stocks, Verbenas, Cinerarias, and other flowering plants should have plenty of water, and if infested with green fly, fumigate with tobacco.

METEOROLOGICAL TABLE, FROM 25TH FEBRUARY TO THE 29TH OF MARCH.

Kept at Schellman Hall, near Sykesville, Carroll county.
Taken at 6 o'clock, a.m., 2 o'clock, noon, and at 6 o'clock.

Wind.	Temperature	Remarks.
25 NE	W 27	25 35 34
NE	S SE	28 32 29
SE	S W	33 50 43
26 NW	NW NW	33 36 34
NW	NW NW	29 41 36
NW	NW NW	29 40 39
3 NW	SW SE	25 48 38
W	W W	33 43 40
NW	W SW	28 43 39
NW	SW SE	24 51 43
S	S SW	34 63 54
SW	SW SW	58 58 51
SE	E SE	40 38 36
SE	SW W	36 53 45
E	NE NE	37 41 37
E	W E	28 40 30
NW	NW NW	20 35 31
NW	NW NW	36 38 31
NW	SW SW	24 43 35
W	W W	18 33 25
NW	NW SW	23 43 38
W	W W	34 42 49
W	W W	32 55 46
SIP	SW SW	31 52 46
NW	S	49 64 61
W	W W	49 50 46
SE	SE S	39 45 45
NW	NW W	40 53 50
W	S	31 61 63
S	N NE	47 49 36
NW	NW	31 40

There is more trouble in having nothing to do, than in having too much to do.

The source of our chargin springs generally from our errors.

Baltimore Market, March 30th.

Cattle.—Beefers were not in active demand on Monday and prices receded. There was 470 head offered at the Scales, of which 60 were driven to Phila.; 34 remain unsold; and the balance, 376 head, were purchased by packers and butchers, at \$2.87½^a\$3.87½ per 100 lbs. on the hoof, equal to \$5.75a\$7.50 net, and averaging \$3.25.

Hogs.—Sales of live Hogs are making at \$6.50a\$7, most, however, at \$6.75.

Flour.—On Saturday there was a sale of 500 bbls. Howard street Flour at 6.12½, deliverable and payable in the latter part of April. On Monday there were purchasers at \$6, but buyers are asking 6.12½, and no sales have taken place. The receipt price is not fixed.

There is an active inquiry for City Mills Flour, and some sales have been made at \$6.12½. Fresh ground parcels, made of Pennsylvania wheat, would command \$6.25.

For Susquehanna Flour \$6 is offered, but holders ask \$6.12½.

Grain.—No Maryland Wheat at market. We note sales of several parcels of Penna. red, some here and some expected to arrive in a day or two, at 133 cts. Sales of Md. white Corn at 76a78 cts. and of yellow at 81a83 cts. No Penna. at market.

We quote Md. Rye at 80 cts. and Oats at 44a45c.

Provisions.—No sales of Pork of any moment have taken place. We quote Mess at \$15.50a\$16, and Prime at \$13 25a13.75. There was a sale of a lot of Shoulders in dry salt at 6.7-8 cts. We quote Mess Beef at \$12.50a13; No. 1 \$10.50a\$11, and Prime 8.50 a\$9. We note sales of Prime Mess in tercets at \$18, and of Prime at \$9 per bbl. In Bacon there has not been much done. We quote Shoulders at 7½a13 3-4 cents; Sides at 8½a9 cents, and Hams at 9½a10 cts. In Lard there have been no sales of any note. The last sales were at 10 cts. for kegs, and 9½ c for bbls.

Coupons in small lots, at 86a87c. **Cotton.**—We note sales of 150 bales fine Upland at 13½a13 3-4cts.

Feathers.—We quote at 25a30 cts. embracing the various qualities. Sales of small lots of fair to good quality at 28a29 cents. **Cloverseed,** \$4a4.50 per bushels.

Molasses.—We note a sale of 210 hhd. Matanzas at 24 cts. and smaller lots at 25a26 cts. Small sales of New Orleans at 36a37 cts. **Rice.**—small sales at \$4.37a4.62 per 100 lbs. **Sugars.**—The stock in market of both New Orleans and Porto Rico is small for the season. The demand this week has been rather limited. At Auction, 253 hhd. Porto Rico were sold at \$7.35a8.15. We note sales by private contract of about 200 hhd. New Orleans at \$7.37a7.75 for common to fair, and \$7.75a8 for good. Strictly prime parcels are held at \$8 25a8.50. We quote Porto Rico at \$7a8.50.

Tobacco.—The market is very inanimate. The large stocks in the hands of shippers and the probability of their remaining here until the middle of the approaching Summer before shipments can be made, together with the determination of most of the Maryland planters to keep their crops at home until prices are more favorable, have a tendency to check all disposition to operate at the same time. We have consequently no sales of moment to report. Some few parcels of the new crop have been received, but they are held above former rates, which we continue, viz.:—Maryland crop, inferior and common, \$1.50a2.50; middling to good \$3a3.50; good \$6; and fine \$7a12. The prices of Ohio are not changed, viz: Common \$1.50a3.50; good \$4.50a6; fine red and

wrapper \$6.50a8; fine yellow \$9a11; and extra wrapper \$10a12. The inspections of the last four weeks are, Md. 1072 hhd; Ohio 33; Ky. 22; Total, 1119 hhd.

Coffee.—The sales of the week, from first hands amount to about 3000 bags Rio, at prices ranging from 7½a8cts. Some lots of Rio have also been sold from second hands. We note sales of 400 bags La Guayra at 8 cents.

SITUATION WANTED, by a laboring-man, who has excellent recommendations, and who is accustomed to working on farm. Apply at this Office.

Ap. 1.

ARYSHIRE BULL FOR SALE, about 15 months old. He is a beautiful animal, and took the prize at the Philadelphia Agricultural Society's Exhibition last Fall.—The owner having had a bull sent to him from Europe, this winter, will sell the above at a reduced price, having no use for him.

Also, several young Durham BULLS and HEIFERS, from 1 month old and upwards. Apply to S. SANDS, office "American Farmer."

Ap. 1

SMULL & CO.

NO. 60 PRATT-ST. and EAST FALLS AVENUE,
3 doors north of Pratt-street Bridge,

HAVE FOR SALE, STEAM BOILERS of various sizes, well adapted to Farms, for cooking food or Cattle—As Economy is the order of the day, they can safely recommend them before any other Boiler now in use, for saving of fuel and labor.

They manufacture likewise to order, Cylinder or Portable Boilers, Force and Light Pumps—Copper, Wrought-iron, and Lead Pipes—Brass Cucks, Couplings, and all other apparatus for Steam purposes.

Ap. 1—All orders thankfully received and promptly executed.

Ap. 1

O SAGE ORANGE SEED.—We have received from Ohio, 25 Quarts Osage Orange Seed, which we are selling at \$4 per quart. Farmers wishing to plant a beautiful and strong live fence should avail themselves of this opportunity. Also on hand a few bushels Jerusalem Artichoke roots at \$2.

R. SINCLAIR, JR. & CO.

62 Light-street, Baltimore.

SEED POTATOES—Just received and for sale, a small lot of Maine Mercer Potatoes, a good article selected for seed, at No. 35, Corner of Light and Pratt-streets.

Ap. 1

E. WHITMAN, JR.

JERSEY BLUES, \$4 per pair; Java Fowls \$3.50 per pair, Turkey Fowls, \$3.50 per pair; mixture of Turkey and Java breeds, \$3.50; Cocks of either breed, \$1.75; Poland Fowls \$3.50.

A few pairs of the above for sale—apply at this office.

Ap. 1

"Spade labour, the perfection of good husbandry."

PULVERIZA-
TION.

DECOMPOSI-
TION.

THE "PREMIUM PLOUGH"—In PROUTY & MEARS' No. 5 1-2, "confessedly the best PLOUGH known in this country for beauty of work and pulverizing the soil," we have combined the most perfect swing as well as wheel Plough, connected also with the principles of self-sharpening and centre-draught, which with the facility of turning it into a Tandem 2, 4, or 3 horses abreast Plough in a minute of time, renders it the **NE PLUS ULTRA** of perfection. During the past season it received the first premium for the **BEST PLOUGH**, at Philadelphia; a first, second and third premium at New Castle county, Del.; the Imperial Medal of Russia, of massive gold, value \$300; and at Prince George's society, Md. the highest testimony of approbation, in not permitting it to compete, having already received the first premium as "the **BEST PLOUGH** for general purposes." Their one-horse Plough No. 2 1-2, is strongly recommended for light soils and horticultural purposes, being built after the same model, self sharpening, and carrying a sod furrow 10 in wide with great ease and precision.

In addition to the above, the Premium list of the Prouty & Mears' Centre Draught Plough for the present season, is as follows, viz:

New Castle Co. Del., 6 premiums out of 8, including the first two premiums.

Concord, Mass., 5 premiums out of 8, furrows 10 in. deep. Philadelphia, 1st premium for the best plough, of the trial. Taunton, Mass., 5 premiums, including the three first premiums.

Newtown, Bucks Co. Pa., "the best Plough for pulverizing the soil and burying the stubble."

For sale at No. 35 LIGHT ST. Baltimore, Mr. EZRA WHITMAN being appointed sole Agent for sales in Baltimore and vicinity.

Ap. 1



GARDEN SEEDS.



The subscriber has on hand a general assortment of GARDEN, FLOWER, and HERB SEEDS. Catalogues may be had on application at his store.

SAMUEL SANDS,

122 Baltimore-street.

PRUNING OF FRUIT TREES.
As from now, to the latter end of February is the proper time for the general pruning of Trees, Shrubs, &c., the subscriber would respectfully offer his services in that branch of his business and begs to assure those who may employ him of his capacity to render satisfaction. JOHN TUOMAY,
PRACTICAL GARDNER, corner of Hoffman & Garden sts. Baltimore.

Orders left at Saml. Feast & Son's Exotic Nursery, corner of Charles and Saratoga streets, or at the office of the American Farmer, will meet with prompt attention. Jan 1

PLoughs! PLoughs!
The subscriber manufacturing Ploughs of various patterns and of different sizes; also Wheat Fans, Cylindrical Straw Cutters, Corn and Tobacco Cultivators, CORN SHELLERS, &c. Also,

THRESHING MACHINES and HORSE POWERS—these latter are used by the following gentlemen, to whom reference is made, as to their superior value, viz. Messrs. S. Beard, T. Beard, Dr. Watkins, T. J. Hodges, T. Welsh, W. Mackall, J. Igleshart, A. Sellman, W. Hopkins, J. Kent, G. R. Gaither all of Anne Arundel county; and to Messrs. R. B. Chew, J. V. Barber, W. Boswell, G. W. Weems, and Z. Howes of Calvert co. Md. (Agent of Evans Davis, Baltimore co. for sale of the Woodcock Plow. Pennsylvania Grain Cradles.

CHAS. H. DRURY,
mhl
Gillingham alley, entrance from Howard st. near Pratt, and store, Hollingsworth st. corner Pratt.

NOTICE.
CLAIRMONT NURSERY,
Near Baltimore, Md.

We again take pleasure in notifying our various customers and the public, that the time has nearly arrived for transplanting Trees, &c., and consider our stock of fruit trees superior to what they have ever been before both in quality and in quantity, as we have had an opportunity of testing their correctness from our standard Trees which are extensively bearing.—We deem it unnecessary to enumerate the various kinds of fruit and ornamental Trees, Shrubbery, Roses, Green House plants, Flower roots, &c. &c., suffice it to say our Nursery and Seed Garden occupies about 100 acres of the Farm, and our determination is to give satisfaction if possible, both in price and quality—printed Catalogues, giving our prices, will be sent gratis; where large quantities are wanted considerable discount will be made. Letters addressed to R. Sinclair, Jr. & Co., Light St., Baltimore, or the subscribers, Balto. Md. will meet with prompt attention.

Persons wishing to act as Agents will please let us hear from them.

Oct 1 SINCLAIR & CORSE.

THE SUBSCRIBER takes pleasure in returning thanks to the many gentlemen who have favoured him with their MILL-WORK; also to the farmers and planters for their liberal support in the Machine line, and would respectfully inform them, that his endeavors to please will continue unremitting. He is prepared at all times to build any of the following kinds of MILLS: Overshot, Pitch Back, Breast, Undershot, Beaming, Steam, Wind, Tide, Horse-power, or Tread Mills; and having the best of workmen employed at patterns and machine making, he can at all times furnish the best articles at the lowest prices, such as Horsepower, Pettigrew Shellers, Murray's Shellers, 4 kinds hand and power Shellers, portable Mills adapted to any power, Corn and Cob grinders, Straw, Hay and Fodder Cutters, Carry log and Mill Screws; also manufactures Hoisting Machines, Hoisting Cranes, Pole Drivers, Turning Lathes and Steam Engines; and any kind of Machine, Model or Mill-work built to order. Any kind of Castings and Smith-work at the lowest prices. I warrant all Mills planned and erected by me to operate well.

JAS. MURRAY,

Millwright, York road Light st. Baltimore.

Also for sale, Jas. Murray's patent separating Shellers, which shells and puts the corn in perfect order at the same time, for the mill or for shipping—Persons living near the city can bring with them one or two barrels of corn, and give the sheller a fair trial before purchasing.

He has also for sale, the following second hand Machinery: 2 pair 4 ft 6 in. French burr Millstones, with all the gearing; 1 pair 3 ft 6 in. French Burr Millstones, with all the gearing; and some Saw Mill work—the whole are good, and any or all of the above will be sold low.

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AGRICULTURAL IMPLEMENTS—LABOR SAVING MACHINERY—**GEORGE PAGE**, Machinist & Manufacturer, Baltimore st. West of Schroeder st. Baltimore, is now prepared to supply Agriculturalists and all others in want of Agricultural and Labor-saving MACHINERY, with any thing in his line. He can furnish Portable Saw Mills to go by steam, horse or water power; Lumber Wheels; Horse Powers of various sizes, ranging in price from \$65 to \$200, and each simple, strong and powerful. His *Horse Power & Threshing Machine*, he is prepared to supply at the low price of \$125 complete; the Threshing Machines without the horse power, according to size, at \$50, 40, 65 and \$75; Improved Seed and Corn Planter, portable Tobacco Press; Portable Grist Mills complete, \$12.

PERUVIAN & ICHABOE GUANO.

FARMERS wishing to apply this valuable manure can be furnished with a pure article at the lowest importation prices by addressing

W. WHITELOCK,

Corner of Gay & High-streets, Baltimore.

Also, Clover, Timothy, and Orchard Seed. 3d Mar. 1

VALUABLE AGRICULTURAL WORKS.—**American Farmers' Encyclopedia**—**Morrell's Shepherd—Alien's American Agriculture**—**Younatt on Cattle—Younatt on the Horse—The Architect**, a valuable new work on Cottage Architecture and Landscape Gardening, 1st vol. complete, in 5 Nos. \$2 50. **Lindley's Guide to the Orchard**, with additions, by Mr. Flory—**Bridgman's Young Gardener's Assistant—Book of Cage Birds**—and a great variety of other works.

Subscriptions received for Agricultural and other Periodicals in any part of the U. S. He would particularly recommend to gardeners, florists, and others, "Hovey's Magazine of Horticulture," and "Downing's Horticulturist," each published at \$3 per annum.

SAMUEL SANDS,
Office of the American Farmer. 122 Baltimore street.

TO FARMERS AND PLANTERS.

The subscriber takes this opportunity to express his grateful acknowledgments to his friends and patrons and the public generally, for the liberal patronage they have bestowed upon his manufacturing establishment during the last twenty-six years, from which he is now desirous of retiring, and if he should succeed in doing so, the public will be duly notified where they can obtain castings from his various improved Plough Patterns which have probably been fitted up with more care at greater expense than similar patterns in this State. He has still on hand about 200 Ploughs of various patterns, and about 30 tons of Plough castings, Cultivators, Harrows of various kinds and sizes; Wheat Fans, Threshing Machines; Horse Powers; Corn-Shellers, and about 50 of his superior Cylindrical Straw Cutters from 11 to 20 inches wide, together with a great variety of others. All the above named articles are faithfully made and of the best materials, and are offered at very reduced prices at wholesale and retail.

J. S. EASTMAN,

No. 180 West Pratt street.

BOMMER'S METHOD FOR MAKING MANURE—The subscriber has been appointed by Mr. Bommer, his agent for the Southern States, and will dispose of the Books, with the right to use them, for any sized farm, at \$5 each. Address (post paid) mhl SAML SANDS, office of "A. Farmer."

The "Simon pure," and invincible WILEY PLOW still in the field—**A. G. MOTT**, at No. 36 ENSON STREET, near the Bel-Air Market—Manufacturer and Vendor of Implements of Husbandry, viz. Plows, Harrows, Cultivators, Grain-Cradles, Wheat-Fans, Corn-Shellers, Straw Cutters, Endless chain Horse Powers, Threshing Machines, &c. &c.—through this medium, would apprise the agricultural community of the fact, that he is the only manufacturer in the "Monumental city" of the GENUINE WILEY PLOW (right and left hand) composed of the real "simon pure" and justly celebrated New York composition, chilled castings, the points of which, are warranted to stand the most rugged soil equal to steel, at a cost of about two cents per acre, for blacksmith's bill—if you are for bargains, call, or send your orders, for he guarantees his implements good as the best, and cheap as the cheapest, for cash, and delivered in any part of the city free of charge.

BADEN CORN.—For Sale at this Office.

The American Farmer.

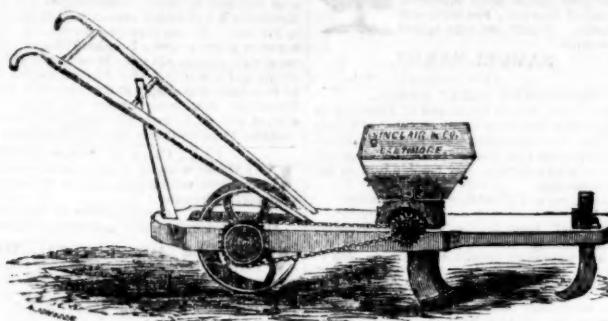
The 2d volume of the new series of this journal commenced on the 1st of July, 1846—it is issued on the 1st of each month.

Terms:—Single copies \$1—Six copies for \$5—Thirteen copies for \$10.—Thirty copies for \$20.

Sample Nos. will be sent to any one desirous of aiding in the circulation of the "Farmer."

Address SAMUEL SANDS,
122 BALTIMORE STREET, BALTIMORE.

SINCLAIR & CO'S SEED DRILLING MACHINE.



IT is with diffidence that we advertise a Seed Drill, as forming a part of our assortment of agricultural Machinery, not because we doubt its utility, but on account of the numerous efforts that have been made and failures to produce an article combining sufficient durability, simplicity and strength to justify their general use.

The machine as represented by the above cut however, was fully tested last summer by several of our most intelligent planters, and with perfect success—all who have tested and examined the construction, united in pronouncing the effort entirely successful. So far as our opinion may be credited, we pronounce them decidedly the best machine of the kind that

we have seen, and the only one adapted to the wants of farmers in this section (or any section) of the United States.

It is as simple, durable and effectual as our famous Sub-soil plough, which is saying much in its favor, when it is acknowledged that the plough alluded to now stands first as regards perfection.

The largest, as well as the smallest seeds may be drilled by this machine; with equal success corn may be planted at any desired distance apart, also beet seed, turnip, peas, beans, &c.

Directions accompanying each machine, which may be easily understood and the dropping cylinders regulated accordingly.

R. SINCLAIR, Jr. & Co., Baltimore.

Ap. 1

PROUTY & MEARS' PREMIUM SELF-SHARPENING PLOUGH.



For Sale at WHITMAN'S,
corner of Light and Pratt sts. Baltimore.

AT the Exhibition of the TALBOT COUNTY AGRICULTURAL SOCIETY, held at Easton, in November, 1846, the Committee on Agricultural Implements, report as follows, viz.—To EZRA WHITMAN, Jr. the Society's highest premiums for

The best Flushing Plough, (Prouty & Mears' No. 54)	-	.85
" Seeding " " do " " 2 1-2	-	.83
" Subsoil " " do " " 2	-	.83
" Wheat Fan, I. T. Grant's	-	.85
" Corn Sheller, E. Whitman's	-	.83
" Straw Cutter, Wm. Hovey's	-	.85
" Fodder Cutter, J. Royer's	-	.83
" Harrow, Geddes'	-	.83

The highest premium has been awarded on the above IMPLEMENTS, at most of the Agricultural Exhibitions in the United States—and the Prouty & Mears' Centre Draught Plough alone, has received more than \$1000 in Premiums!

Farmers wishing to purchase any of the above, may find them for sale at the Warehouse of the subscriber, corner of Pratt & Light-sts., who is the manufacturers only Agent for the sale of them in Maryland and vicinity.

Where may also be found many other new and useful Improved Implements, suited to the wants of the Agriculturist.

EZRA WHITMAN, Jr.

Corner of Light and Pratt Streets, Baltimore, Md.

FOR SALE AS ABOVE,

200 Whitman's Wrought Iron Rail Way Horse Power,
50 Best Sweep Horsepowers—2, 4 and 6 Horses,
100 Whitman's patent Thrashers, which threshes & cleans at same operation.

100 various kinds Thrashers, with and without Straw Carriers,
2000 Ploughs, embracing all the sizes made by Prouty & Mears
of Boston; Ruggles, Nourse & Mason, of Worcester, and
various other manufacturers.

350 Corn and Tobacco Cultivators, various patterns;	And a variety of Spades, Shovels, Hoes, Rakes, Harrows, and every article wanted in the farming line.
200 Wheat Fans, variety of patterns, among which is I. T. Grant's, N. Y.	
250 Corn Shellers,	
250 Straw Cutters,	
100 Corn & Cob Crushers	

POUDETTE.—A few barrels from the Philadelphia Manufactory, for sale by SAMUEL SANDS, 122 Baltimore-street.

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